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**Ahmad Mohammad Ibrahim Obeidat**

**THE NATURE, ANTECEDENTS AND OUTCOMES OF  
INTERPERSONAL TRUST WITHIN CO-WORKER  
RELATIONSHIPS IN JORDAN**

**ABSTRACT**

Research in the area of interpersonal trust within organisations has to a great extent focused on developing theoretical models identifying the nature, antecedents and outcomes of trust and empirically testing these models within the context of various organisational work relationships. However, the applicability of the propositions introduced by these models to cultural contexts different from those in which they were initially developed and to previously overlooked work relationship contexts has not been thoroughly understood or empirically examined. This thesis mainly examines trust, its antecedents and outcomes in co-worker relationship contexts involving permanent and contingent co-workers working within Jordanian organisations. The thesis reports the findings of two studies through which the applicability of the propositions of one of the most widely accepted theoretical frameworks pertaining to trust (the Mayer, Davis and Schoorman, 1995, integrative model of organisational trust) to co-worker contexts is empirically tested through the analysis of interview data collected from twenty employees and through the analysis of questionnaire data collected from two hundred employees (154 permanent employees and 46 contingent employee) from five different Jordanian organisations. Mayer et al.'s (1995) proposed model was mostly generalizable across co-worker contexts involving permanent and contingent employees. In addition, trust in a co-worker related significantly to interpersonal citizenship behaviours (ICB) towards the respective co-worker and unlike contingent employees, permanent employees differentiated between their permanent and contingent co-workers in terms of trust, trustworthiness perceptions and ICBs. However, both groups did not differentiate between their co-workers in terms of antisocial work behaviours. These findings indicate for academics and practitioners the importance of considering the employment status of employees when examining or managing the antecedents and outcomes of trust across various co-worker relationship contexts.

**The Nature, Antecedents and Outcomes of  
Interpersonal Trust within Co-worker  
Relationships in Jordan**

**Ahmad Mohammad Ibrahim Obeidat**

Thesis submitted in fulfilment of the requirements for the degree of  
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# TABLE OF CONTENTS

|                                     |      |
|-------------------------------------|------|
| <b>Abstract</b> .....               | i    |
| <b>Title Page</b> .....             | ii   |
| <b>Table of Contents</b> .....      | iii  |
| <b>List of Appendices</b> .....     | ix   |
| <b>List of Tables</b> .....         | x    |
| <b>List of Figures</b> .....        | xiii |
| <b>Statement of Copyright</b> ..... | xiv  |
| <b>Acknowledgements</b> .....       | xv   |
| <b>Dedication</b> .....             | xvi  |
| <b>Preface</b> .....                | xvii |

## **Chapter One: Interpersonal Trust within Organisations: Research Questions, Literature Review and Theoretical Framework** .....

|  |    |
|--|----|
| 1.1 Introduction .....   | 1  |
| 1.1.1 General Context and Focus of the Thesis.....                           | 1  |
| 1.1.2. The Importance of Interpersonal Trust .....                           | 2  |
| 1.1.3 Research Problems, Contributions and Rationale.....                    | 5  |
| 1.1.3.1 Cross-Cultural Trust.....  | 5  |
| 1.1.3.1.1 The Bachmann's (2011) and Dietz (2011) Debate.....                 | 10 |
| 1.1.3.2 Trust Research across Workplace Relationship Contexts.....           | 11 |
| 1.1.3.3 Nature of Trust Outcomes.....  | 25 |
| 1.1.4 Research Questions.....  | 29 |
| 1.2 Literature Review.....   | 31 |
| 1.2.1 The Nature of Interpersonal Trust.....                                 | 31 |
| 1.2.1.1 Definition of Trust.....   | 31 |
| 1.2.1.2 Models of Interpersonal Trust Development (Review and Critique)..... | 34 |
| 1.2.1.2.1 Operationalization of trust.....                                   | 35 |
| 1.2.1.2.2 Levels of Analyses and Range of Antecedents.....                   | 45 |
| 1.2.1.2.3 Critique of Available Measures.....                                | 48 |
| 1.2.2 Cross-Cultural Trust.....  | 49 |
| 1.2.2.1 Early Theoretical Contributions Linking Culture to Trust.....        | 49 |
| 1.2.2.2 Empirical Research Findings.....                                     | 53 |

|   |            |
|---|------------|
| 1.2.2.2.1 The Meaning of Trust and Trustworthiness across Cultures.....         | 53         |
| 1.2.2.2.2 The Antecedents of Trust across Cultures.....                         | 55         |
| 1.2.2.2.3 The Outcomes of Trust across Cultures.....                            | 59         |
| 1.2.3 Trust in Co-worker.....   | 64         |
| 1.2.3.1 Antecedents of Co-worker Trust.....                                     | 65         |
| 1.2.3.2 Outcomes of Co-worker Trust.....  | 69         |
| 1.2.3.3 Relations among Trust in Different Referents .....                      | 71         |
| 1.2.3.4 Limitations.....  | 71         |
| 1.3 Theory and Hypotheses .....   | 74         |
| 1.3.1 Theory.....   | 79         |
| 1.3.1.1 The Integrative Model of Organisational Trust, Mayer et al., (1995).... | 79         |
| 1.3.1.2 Social Exchange Theory.....   | 81         |
| 1.3.1.3 Social Identity Theory and Self-Categorization Theory.....              | 83         |
| 1.3.2 Hypotheses.....   | 85         |
| 1.3.3 Conceptual Model.....   | 105        |
| 1.4 Research Philosophical Position .....                                       | 107        |
| 1.5 Methodology.....  | 108        |
| 1.6 Outline of the Thesis .....   | 109        |
| 1.7 Summary .....   | 111        |
| <b>Chapter Two: Methods – Qualitative Study .....</b>                           | <b>113</b> |
| 2.1 Research Approach .....   | 113        |
| 2.2 Participants and Procedure .....  | 113        |
| 2.2.1 Recruitment of Participants .....   | 113        |
| 2.2.2 Translation of Interview Questions .....                                  | 115        |
| 2.2.3 Pilot Testing the Interview Questions .....                               | 116        |
| 2.2.4 The Interviews .....  | 117        |
| 2.2.5 Sample Characteristics .....  | 121        |
| 2.2.6 Analysis of the Interviews .....  | 122        |
| 2.3 Data Quality Issues .....   | 124        |
| 2.3.1 Validity and Credibility .....  | 124        |
| 2.3.2 Reliability and Dependability .....                                       | 125        |
| 2.4 Summary .....   | 126        |

|   |                |
|---|----------------|
| <b>Chapter Three: Analysis of Qualitative Data .....</b>  | <b>128</b>     |
| 3.1 Introduction .....  | 128            |
| 3.2 Results .....   | 129            |
| 3.2.1 Jordanian Employees' View of Trust: Themes in Trust Definitions.....  | 129            |
| 3.2.1.1 Jordanian Employees' View of the 'Willingness to be Vulnerable'<br>Element of Trust .....                         | 130            |
| 3.2.1.2 Jordanian Employees' View of the 'Positive Expectations' Element<br>of Trust.....                                 | 131            |
| 3.2.2 How Jordanian Employees View the Antecedents of Trust and Distrust<br>in Co-worker (Indigenous Manifestations)..... | 133            |
| 3.2.2.1 How Jordanian Employees View Benevolence.....   | 136            |
| 3.2.2.2 How Jordanian Employees View Lack of Benevolence.....   | 137            |
| 3.2.2.3 How Jordanian Employees View Ability.....   | 139            |
| 3.2.2.4 How Jordanian Employees View Lack of Ability.....   | 140            |
| 3.2.2.5 How Jordanian Employees View Integrity.....   | 140            |
| 3.2.2.6 How Jordanian Employees View Lack of Integrity.....   | 141            |
| 3.2.2.7 How Jordanian Employees View Predictability.....  | 142            |
| 3.2.2.8 How Jordanian Employees View Lack of Predictability.....  | 143            |
| 3.2.2.9 How Jordanian Employees View Other Antecedent Categories.....   | 143            |
| 3.2.2.10 The Impact of Antecedent Categories on Trust and Distrust<br>Development .....                                   | 146            |
| 3.3 Summary .....   | 148            |
| <br><b>Chapter Four: Discussion of Qualitative Study Results .....</b>  | <br><b>149</b> |
| 4.1 Introduction .....  | 149            |
| 4.2 Nature of Trust .....   | 149            |
| 4.3 Antecedents of Trust and How They are Viewed by Jordanian Employees .....   | 151            |
| 4.4 Antecedents of Distrust (Not Trusting) and How They are Viewed by<br>Jordanian Employees .....                        | 156            |
| 4.5 What is Uniquely Jordanian about the Findings.....  | 157            |
| 4.6 The Debate on the Etic vs Emic Nature of Trust and Dietz vs Bachmann .....  | 159            |
| 4.7 Limitations and Future Research.....  | 160            |

|   |   |            |
|---|---|------------|
| 4.8   | Summary .....   | 162        |
| <b>Chapter Five: Methods – Quantitative Study .....</b> |   | <b>164</b> |
| 5.1   | Research Approach .....   | 164        |
| 5.2   | Participants and Procedure .....  | 165        |
| 5.3   | Response Rates .....  | 171        |
| 5.4   | Sample Characteristics .....  | 173        |
| 5.5   | Measures .....  | 174        |
| 5.6   | Summary .....   | 178        |
| <b>Chapter Six: Analysis of Quantitative Data .....</b> |   | <b>179</b> |
| 6.1   | Introduction .....  | 179        |
| 6.2   | Procedure for Data Analysis .....   | 179        |
| 6.3   | Preliminary Analysis .....  | 182        |
| 6.3.1   | Principal Component Analysis (PCA) .....                                  | 182        |
| 6.3.2   | Common Method Variance .....  | 186        |
| 6.3.3   | Statistical Tests Assumptions .....                                       | 186        |
| 6.3.4   | Descriptive Statistics, Inter-Correlations and Reliability Analysis ..... | 188        |
| 6.3.5   | One-Way between-Groups ANOVA with Post-Hoc Tests' .....                   | 195        |
| 6.4   | Results .....   | 195        |
| 6.4.1   | Control Variables.....  | 196        |
| 6.4.2   | Regression Analyses .....   | 199        |
| 6.4.2.1   | Antecedent of Trust in a Permanent/Contingent Co-worker.....              | 200        |
| 6.4.2.1.1   | Antecedents of Trust in Contingent Co-worker .....                        | 200        |
| 6.4.2.1.2   | Antecedents of Trust in Permanent Co-worker .....                         | 202        |
| 6.4.2.1.3   | Summary .....   | 204        |
| 6.4.2.2   | Relations between Trust Propensity and Trustworthiness Factors .....      | 205        |
| 6.4.2.2.1   | Summary .....   | 209        |
| 6.4.2.3   | The Relative Importance of Trustworthiness Factors .....                  | 209        |
| 6.4.2.3.1   | Summary .....   | 215        |
| 6.4.2.4   | Relationship between Trust in Different Referent Types.....               | 216        |
| 6.4.2.4.1   | Trust in Contingent Co-worker as Dependent Variable .....                 | 216        |
| 6.4.2.4.2   | Trust in Permanent Co-worker as Dependent Variable .....                  | 218        |



|  |            |
|--|------------|
| 6.4.2.4.3 Summary .....  | 220        |
| 6.4.2.5 Trust in Co-worker and its Behavioural Outcomes .....  | 220        |
| 6.4.2.5.1 Trust in Co-worker and Antisocial work Behaviours .....  | 220        |
| 6.4.2.5.1.1 Antisocial work Behaviours towards Contingent Co-worker .....  | 220        |
| 6.4.2.5.1.2 Antisocial work Behaviours towards Permanent Co-worker .....   | 222        |
| 6.4.2.5.1.3 Summary .....  | 224        |
| 6.4.2.5.2 Trust in Co-worker and Person-Focused ICB .....  | 224        |
| 6.4.2.5.2.1 Person-Focused ICB towards Contingent Co-worker .....  | 224        |
| 6.4.2.5.2.2 Person-Focused ICB towards Permanent Co-worker .....   | 226        |
| 6.4.2.5.2.3 Summary .....  | 227        |
| 6.4.2.5.3 Trust in Co-worker and Task-Focused ICB .....  | 227        |
| 6.4.2.5.3.1 Task-Focused ICB towards Contingent Co-worker .....  | 227        |
| 6.4.2.5.3.2 Task-Focused ICB towards Permanent Co-worker .....   | 229        |
| 6.4.2.5.3.3 Summary .....  | 229        |
| 6.4.2.6 The Strength of Relations between Trust and the Two Forms of ICB...  | 230        |
| 6.4.2.6.1 Summary .....  | 230        |
| 6.4.3 Paired Sample t-test.....  | 231        |
| 6.4.3.1 Differences in the Levels of Trust, its Antecedent and Outcomes<br>towards In-Group and Out-Group Members..... | 231        |
| 6.4.3.1.1 Sample 1 (154 Permanent Employees) .....   | 233        |
| 6.4.3.1.2 Sample 2 (46 Contingent Employees) .....   | 235        |
| 6.4.3.1.3 Sample 3 (200 Employees) .....   | 236        |
| 6.4.3.1.4 Summary .....  | 237        |
| 6.5 Chapter Summary .....  | 238        |
| <b>Chapter Seven: Discussion of Quantitative Study Results.....</b>  | <b>239</b> |
| 7.1 Introduction .....   | 239        |
| 7.2 Antecedents of Trust in Contingent/Permanent Co-worker .....   | 239        |
| 7.3 Relations between Trust Propensity and Trustworthiness Factors .....   | 245        |
| 7.4 The Relative Importance of Trustworthiness Factors .....   | 248        |
| 7.5 Relationship between Trust in Different Referent Types .....   | 249        |
| 7.6 Trust in Co-worker and its Behavioural Outcomes .....  | 250        |
| 7.6.1 Trust in Co-worker and Antisocial Work Behaviours .....  | 250        |

|  |     |
|--|-----|
| 7.6.2 Trust in Co-worker and Person-Focused/Task-Focused ICBs .....  | 253 |
| 7.7 The Strength of Relations between Trust in Co-worker and its Positive<br>Outcomes (Person-Focused and Task-Focused ICBs) ..... | 253 |
| 7.8 Differentiating between In-Group and Out-Group Co-workers .....  | 254 |
| 7.9 What is Uniquely Jordanian about the Findings.....   | 259 |
| 7.10 Summary .....   | 260 |
| <b>Chapter Eight: Overall Discussion and Conclusion</b> .....  | 261 |
| 8.1 Introduction .....   | 261 |
| 8.2 Thesis Overall Conclusions .....   | 263 |
| 8.2.1 Qualitative Study Conclusions .....  | 263 |
| 8.2.2 Quantitative Study Conclusions .....   | 265 |
| 8.3 Quantitative Study Limitations and Recommendations for Future<br>Research .....  | 268 |
| 8.4 Research Implications .....  | 278 |
| 8.4.1 Implications for Theory .....  | 278 |
| 8.4.2 Implications for Practice .....  | 279 |
| 8.4.2.1 Practical Implications of the Qualitative Study Findings .....   | 280 |
| 8.4.2.2 Practical Implications of the Quantitative Study Findings .....  | 280 |
| 8.4.2.2.1 Antecedents and Outcomes of Trust in Contingent/Permanent<br>Co-worker.....  | 281 |
| 8.4.2.2.2 Other Findings .....   | 283 |
| 8.4.2.2.3 Differentiating between Permanent and Contingent Employees...  | 284 |
| <b>Appendices</b> .....  | 287 |
| <b>References</b> .....  | 380 |

## LIST OF APPENDICES

|  |     |
|--|-----|
| <b>Appendix 1</b> .....  | 287 |
| <b>Appendix 1.1:</b> Interview questions .....   | 287 |
| <b>Appendix 1.2:</b> Sample of interview transcripts.....  | 288 |
| <b>Appendix 2</b> .....  | 299 |
| <b>Appendix 2.1:</b> Item examples that reflect each theme identified in trust definitions provided by the Jordanian sample (n=20) .....   | 299 |
| <b>Appendix 2.2:</b> Item examples that reflect each trust antecedent identified in critical incidents reported by the Jordanian sample (n=18) .....   | 303 |
| <b>Appendix 2.3:</b> Item examples that reflect each trust antecedent identified in explicit answers provided by the Jordanian sample (n=20) .....   | 305 |
| <b>Appendix 2.4:</b> Item examples that reflect each distrust antecedent identified in critical incidents reported by the Jordanian sample (n=19) .....  | 309 |
| <b>Appendix 2.5:</b> Item examples that reflect each distrust antecedent identified in explicit answers provided by the Jordanian sample (n=20) .....  | 312 |
| <b>Appendix 3</b> .....  | 314 |
| <b>Appendix 3.1:</b> Information sheet (Informed consent) .....  | 314 |
| <b>Appendix 3.2:</b> Questionnaire (English version) .....   | 316 |
| <b>Appendix 3.3:</b> Arabic translation of items for each scale in the questionnaire.....  | 326 |
| <b>Appendix 4</b> .....  | 329 |
| <b>Appendix 4.1:</b> Results of the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity for the three samples (n=154, 46, 200) .....   | 329 |
| <b>Appendix 4.2:</b> Number of components recommended to be retained by each PCA criterion for the three samples (n=154, 46, 200) .....  | 330 |
| <b>Appendix 4.3:</b> Scree plots for each scale in each of the three samples .....   | 331 |
| <b>Appendix 4.4:</b> Scree plots for the propensity to trust scale (6 items) .....   | 347 |
| <b>Appendix 4.5:</b> Significance values for the 'Test of homogeneity of variances' and the 'Welch' and 'Brown-Forsythe' F-ratios for each scale in each of the three samples (n=154, 46, 200) ..... | 348 |
| <b>Appendix 4.6:</b> Normal probability plots .....  | 349 |
| <b>Appendix 4.7:</b> One-way between-groups ANOVA with POST-HOC tests (n=154, 46, 200).....  | 373 |

|   |     |
|---|-----|
| <b>Appendix 4.8:</b> Correlation matrices between control variables and the dependent variables in each of the three samples (n=154, 46, 200) ..... | 377 |
|---|-----|

## LIST OF TABLES

|   |     |
|---|-----|
| <b>Table 3.1:</b> List and frequency of themes in trust definitions provided by the Jordanian sample (n=20) .....                                       | 129 |
| <b>Table 3.2:</b> List and frequency of antecedents of trust in co-worker provided by the Jordanian sample (n=20).....                                  | 134 |
| <b>Table 3.3:</b> List and frequency of antecedents of distrust in co-worker provided by the Jordanian sample (n=20).....                               | 135 |
| <b>Table 3.4:</b> Definitions for manifestations of benevolence within a Jordanian context .....  | 137 |
| <b>Table 3.5:</b> Definitions for manifestations of lack of benevolence within a Jordanian context .....  | 138 |
| <b>Table 3.6:</b> Definitions for six of the manifestations of Integrity within a Jordanian context .....   | 141 |
| <b>Table 5.1:</b> Survey response rates .....   | 171 |
| <b>Table 6.1:</b> Groups sample sizes .....   | 180 |
| <b>Table 6.2:</b> Number of components recommended to be retained by scree plots for each of the three samples (n=154, 46, 200) .....                   | 183 |
| <b>Table 6.3:</b> Cronbach Alpha score if items were deleted from the ‘Propensity to trust scale’ (8 items) in the three samples (n=154, 46, 200) ..... | 185 |
| <b>Table 6.4 (Part 1):</b> Descriptive statistics, correlations, and reliabilities for permanent employee sample (n=154) .....                          | 189 |
| <b>Table 6.4 (Part 2):</b> Descriptive statistics, correlations, and reliabilities for permanent employee sample (n=154) .....                          | 190 |
| <b>Table 6.5 (Part 1):</b> Descriptive statistics, correlations, and reliabilities for contingent employee sample (n=46) .....                          | 191 |
| <b>Table 6.5 (Part 2):</b> Descriptive statistics, correlations, and reliabilities for contingent employee sample (n=46) .....                          | 192 |
| <b>Table 6.6 (Part 1):</b> Descriptive statistics, correlations, and reliabilities for combined sample (n=200) .....                                    | 193 |

|   |     |
|---|-----|
| <b>Table 6.6 (Part 2):</b> Descriptive statistics, correlations, and reliabilities for combined sample (n=200) .....  | 194 |
| <b>Table 6.7:</b> Controlled variables for each dependent variable and in each of the three samples (n= 154, 46, 200) .....   | 196 |
| <b>Table 6.8:</b> $R^2$ for all control variables when included in the regression analyses (n=154, 46, 200). .....  | 198 |
| <b>Table 6.9:</b> Hierarchical regression analysis examining antecedents to trust in contingent co-worker (n=154, 46, 200) .....  | 201 |
| <b>Table 6.10:</b> Hierarchical regression analysis examining antecedents to trust in permanent co-worker (n=154, 46, 200) .....  | 203 |
| <b>Table 6.11:</b> Linear regression analysis examining the predictors of the perceived ability of contingent co-worker and permanent co-worker (n=154, 46 200) .....   | 206 |
| <b>Table 6.12:</b> Linear regression analysis examining the predictors of the perceived benevolence of contingent co-worker and permanent co-worker (n=154, 46 200) ... | 207 |
| <b>Table 6.13:</b> Linear regression analysis examining the predictors of the perceived integrity of contingent co-worker and permanent co-worker (n=154, 46 200) ..... | 208 |
| <b>Table 6.14:</b> Relative importance indices from standard multiple regression and relative weight analyses for trust in contingent co-worker (n=154, 46, 200) .....  | 210 |
| <b>Table 6.15:</b> Confidence intervals around all pairwise differences between relative weights for the dependent variable trust in contingent co-worker (n=154) ..... | 211 |
| <b>Table 6.16:</b> Confidence intervals around all pairwise differences between relative weights for the dependent variable trust in contingent co-worker (n=46) .....  | 211 |
| <b>Table 6.17:</b> Confidence intervals around all pairwise differences between relative weights for the dependent variable trust in contingent co-worker (n=200) ..... | 212 |
| <b>Table 6.18:</b> Relative importance indices from standard multiple regression and relative weight analyses for trust in permanent co-worker (n=154, 46, 200) .....   | 213 |
| <b>Table 6.19:</b> Confidence intervals around all pairwise differences between relative weights for the dependent variable trust in permanent co-worker (n=154) .....  | 214 |
| <b>Table 6.20:</b> Confidence intervals around all pairwise differences between relative weights for the dependent variable trust in permanent co-worker (n=46) .....   | 214 |
| <b>Table 6.21:</b> Confidence intervals around all pairwise differences between relative weights for the dependent variable trust in permanent co-worker (n=200) .....  | 215 |

|  |     |
|--|-----|
| <b>Table 6.22:</b> Hierarchical regression analysis examining relations between trust in different referents #1, trust in contingent co-worker as dependent variable. (n=154, 46, 200) ..... | 217 |
| <b>Table 6.23:</b> Hierarchical regression analysis examining relations between trust in different referents #2, trust in permanent co-worker as dependent variable. (n=154, 46, 200) .....  | 219 |
| <b>Table 6.24:</b> Hierarchical regression analysis examining antecedents to antisocial work behaviours towards contingent co-worker (n=154, 46, 200) .....                                  | 221 |
| <b>Table 6.25:</b> Hierarchical regression analysis examining antecedents to antisocial work behaviours towards permanent co-worker (n=154, 46, 200) .....                                   | 223 |
| <b>Table 6.26:</b> Hierarchical regression analysis examining antecedents to person-focused ICB towards contingent co-worker (n=154, 46, 200) .....  | 225 |
| <b>Table 6.27:</b> Hierarchical regression analysis examining antecedents to person-focused ICB towards permanent co-worker (n=154, 46, 200) .....   | 226 |
| <b>Table 6.28:</b> Hierarchical regression analysis examining antecedents to task-focused ICB towards contingent co-worker (n=46) .....  | 228 |
| <b>Table 6.29:</b> Hierarchical regression analysis examining antecedents to task-focused ICB towards permanent co-worker (n=154, 46, 200) .....   | 230 |
| <b>Table 6.30:</b> Paired samples t-test mean scores for compared variables (n=154, 46, 200) .....   | 232 |
| <b>Table 6.31:</b> Paired sample t-test, significance of the difference in mean values of the compared variables (n=154) .....   | 234 |
| <b>Table 6.32:</b> Paired sample t-test, significance of the difference in mean values of the compared variables (n=46) .....  | 235 |
| <b>Table 6.33:</b> Paired sample t-test, significance of the difference in mean values of the compared variables (n=200) .....   | 237 |
| <b>Table 7.1:</b> Overview of initial support for hypotheses in the three samples (n=154, 46, 200) .....   | 240 |
| <b>Table 7.2:</b> Results of hypotheses testing in the three samples (n=154, 46, 200) .....  | 241 |
| <b>Table 8.1:</b> Antecedents and outcomes of trust within each co-worker relational context .....   | 266 |
| <b>Table 8.2:</b> Results of common latent factor test in each of the three samples (n=154, 46, 200).....  | 270 |

|   |     |
|---|-----|
| <b>Table 4.7–1:</b> Significance values from the output ‘ANOVA’ for each of the 16 variables in each sample (n=154, 46, 200).....                           | 374 |
| <b>Table 4.7–2:</b> Mean scores for each of the three variables in each group within the permanent employee sample (n=154) .....                            | 375 |
| <b>Table 4.7–3:</b> Mean scores for antisocial work behaviours towards contingent co-worker in each group within the contingent employee sample (n=46)..... | 375 |
| <b>Table 4.7–4:</b> Mean scores for the three variables in each group within the combined employee sample (n=200).....                                      | 376 |

## LIST OF FIGURES

|  |     |
|--|-----|
| <b>Figure 1.1:</b> The integrative model of organisational trust .....   | 37  |
| <b>Figure 1.2:</b> Model of initial formation of trust .....   | 39  |
| <b>Figure 1.3:</b> Depiction of the trust process .....  | 40  |
| <b>Figure 1.4:</b> Theoretical model outlining the role of trust in interpersonal relationships in organisations ..... | 42  |
| <b>Figure 1.5:</b> Thesis outline .....  | 105 |
| <b>Figure 1.6:</b> Conceptual model .....  | 110 |
| <b>Figure 6.1:</b> Structure and flow of the results section .....   | 195 |

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*My beloved parents, for without their love, support, sacrifice and prayers none of this  
would have been possible*

*My two brothers, for their love and support*

## **PREFACE**

A number of reasons made me interested in trust as a topic of research. My interest in trust within organisations was first aroused when I was looking for a topic to research for my PhD thesis. Yet this interest in trust has grown throughout my PhD studies. To begin with, I chose trust in organisations as a main theme to research because I wanted an interesting and relevant topic that was within the realm of organisational behaviour (OB) and human resource management (HRM) and would distinguish me as a researcher in these fields. I thought that I should be looking for a topic that was new for me and that was gaining the interest of current researchers. Therefore, I started looking at what OB and HRM researchers in the universities I was applying for were interested in researching in terms of topics (which is what a student looking to be accepted as a PhD candidate would normally do to increase his/her chances of being accepted). One of the topics that caught my attention and was relatively new to me was trust in organisations. Through an initial search and review of extant literature focusing on this topic, I found that there was extensive research on trust in organisations which I thought manifested itself as a number of research streams that were gaining increasing momentum, thus reflecting OB and HRM researchers increasing interest in this topic and the increasing importance of this topic for organisations.

Yet, as I mentioned earlier, my personal interest in the phenomenon of trust mainly developed and gained momentum during my PhD studies. This interest was based on what I learned from reviewing the trust literature about the important role trust plays in facilitating a wide range of positive and desirable outcomes for the individual, group, organisation and society in general. For me as a researcher who is attempting to contribute to the advancement of knowledge in this area that (as theorized by previous research) has the potential to increase the wellbeing of individuals, groups, organisations and society, such a construct would be interesting to investigate because of its potential importance.

As an individual, my interest in this topic was also based on the wide applicability of what I learned about the nature of trust and the theories that govern the relationships between trust and other constructs to the interpretation and better understanding of what I perceive around me in terms of events, relationships and behaviours of individuals and groups towards other relational parties in varying contexts. That is, what I learned about

trust and the theories in this thesis provided me with a lens through which I can view and better analyse and understand my relationships with others and even relationships around me. Throughout and during each stage of the process of working on my PhD thesis, whenever I was attempting to understand a certain event, relationship or behaviour that I perceive or have perceived in the past in any context, I would occasionally reflect on what I learned. Such reflection would usually provide me with a different and better interpretation and understanding of these perceptions.

# **CHAPTER ONE**

## **INTERPERSONAL TRUST WITHIN ORGANISATIONS:**

### **Research Questions, Literature Review and Theoretical Framework**

#### **1.1 Introduction**

##### **1.1.1 General Context and Focus of the Thesis**

According to Redman, Dietz, Snape and van der Borg (2011) given the importance of trust to both economic and employee well-being, it is currently widely examined across different national societal cultures. For example, the acknowledgement of the importance of trust (discussed in more detail in the following section) resulted in numerous studies (e.g. Wasti, Tan and Erdil, 2011; Wasti, Tan, Brower and Önder, 2007; Tan and Chee, 2005) and even reviews (e.g. Ferrin and Gillespie, 2010) examining interpersonal trust in and across different national-societal cultures. Similarly, another consequence is that many studies (e.g. Knoll and Gill, 2011; Redman et al., 2011) and meta-analyses (e.g. Colquitt, Scott and LePine, 2007; Dirks and Ferrin, 2002) have emerged to examine interpersonal trust in and across different work relationship contexts within organisations, which translate to the examination of trust in and across different organisational foci (e.g. organisation, management, leader, supervisor, subordinate, co-worker/peer/colleague/team-member).

Within this literature that spans across cultural and relational contexts, a number of research themes emerged which mostly represented attempts to develop, introduce and/or empirically test a theoretical model/framework that can explain the nature of trust and identify its antecedents and outcomes within different cultures and within work relationships between different organisational members and even at different stages of these work relationships. Consequently, a considerable part of the trust literature can be categorised under three major research themes; the theme focusing on identifying the nature or conceptualisation of trust, the theme focusing on identifying the antecedents of trust and finally the theme focusing on identifying the outcomes of trust.

Anchored mostly in the theoretical propositions of the Mayer, Davis and Schoorman's (1995) integrative model of organisational trust and the propositions of social exchange theory, the two studies reported in this thesis (one qualitative and the other quantitative) take place in Jordan, where there is a dearth of research on trust within organisations and within Jordan's national-societal culture in which these organisations and their members operate. The first study focuses on the general co-worker relationship context and adopts an etic (universal) perspective in qualitatively exploring the meaning of trust and the development of trust and distrust as perceived by employees in Jordanian organisations before adopting an emic perspective in exploring any indigenous manifestations of the antecedents of co-worker trust and distrust (especially those relating to the ability, benevolence and integrity of the trustee).

The second study adopts an etic perspective in quantitatively examining the antecedents and individual-level outcomes of trust (both positive and negative behaviours of the trustor towards the trustee) in permanent and contingent co-workers. That is, the study focuses on trust foci which despite their potential for differential levels of trust, have not been examined in previous research on co-worker trust in Western or other cultural contexts. In addition, there is dearth of research examining possible links between co-worker trust and negative behaviours. Finally, drawing on the propositions of both social exchange theory and social identity theory, the second study also compares between permanent and contingent trustees in terms of their trustworthiness as perceived by participants, the levels of trust that study participants place on them and the level of positive and negative behaviours directed towards them by the study participants.

### **1.1.2. The Importance of Interpersonal Trust**

Several scholars and researchers (e.g. Dietz and Den Hartog, 2006; Blunsdon and Reed, 2003; Tyler, 2003; Dirks and Ferrin, 2002; Mayer et al., 1995; McAllister, 1995) in the areas of organisational behaviour and human resource management agree that trust is receiving increasing interest from researchers and is considered by many as an important construct in organisational research. For example, Eberl (2004) acknowledges that trust has been intensively discussed in organisation research. Similarly, Dietz and Den Hartog (2006) state that management and organisational literature on trust is currently extensive.

Tyler (2003) attributes this increasing interest in trust to the strong desire to understand how to produce effective co-operation within organisations. Furthermore, numerous researchers (e.g. Gill, Boies, Finegan and McNally, 2005; Bijlsma and van de Bunt, 2003; Costa, 2003) acknowledge the general assumption that trust is an important lubricant of the social system, economic transactions between actors in organisations and successful working relationships. For example, Clark and Payne (1997) state that trust's diverse definitions and meanings presented by researchers highlight the construct's multidimensionality, and its importance as a critical component of social interaction. Moreover, Hosmer (1995) notes the united agreement of researchers from different fields on the importance of trust in the conduct of human affairs.

One of the reasons why trust is important stems from the acknowledgment of many scholars and researchers (e.g. Dunn, Ruedy and Schweitzer, 2011; Lau and Liden, 2008; Ferrin, Dirks and Shah, 2006; Lewicki, Tomlinson and Gillespie, 2006; Whitener, Brodt, Korsgaard and Werner, 1998) that trust has significant relationships with many desired outcomes and work consequences. Atkinson and Butcher (2003) attribute the growing importance and interest in the phenomenon of trust to the growing emphasis organisational theorists are placing on co-operative relationships (at the expense of other organisation principles such as economic efficiency and hierarchy) as a response to organisational environments characterised by complexity, speed and fragmentation. Another reason why trust is important is that "numerous researchers have proposed that trust is essential for understanding interpersonal and group behavior" (Hosmer, 1995, p.379). Mayer et al. (1995) attributed the increase in the importance of trust to trends in both workforce composition and the organization of the workplace such as: the increase of diversity, more participative management styles, and the implementation of work teams.

At a more general level, Tyler (2003) states that the study of trust is becoming important in a number of fields such as; political science, policy studies, law, organisational psychology, organisational behaviour and behavioural economics. Webber (2008) supports this by noting that interpersonal trust has been examined in many disciplines including negotiation, sociology, psychology, strategy and organisational behaviour.

The wide acknowledgment by scholars and researchers of the growing importance and interest in trust within the fields of organisational behaviour and human resource management is supported by and partly based on, empirical evidence gathered from organisational contexts linking trust in different foci to various benefits in the form of attitudinal and behavioural outcomes at the individual, group and organisational levels. For example, under the research theme emphasizing interpersonal trust outcomes and consequences, a number of research streams have appeared. One of these has associated trust with outcomes at the organisational level such as organisational performance (e.g. Tzafrir and Eitam-Meilik, 2005; Tzafrir, 2005; Gould-Williams, 2003; Davis, Schoorman, Mayer and Tan, 2000). Another stream links trust to team outcomes such as team performance and satisfaction (e.g. Webber, 2008; Costa, 2003). A further research stream links trust to outcomes at the individual level, such as: task performance (e.g. Yang, Mossholder and Peng, 2009; Salamon and Robinson, 2008; Colquitt et al., 2007), reciprocity which can be considered another word for cooperation (e.g. Pillutla, Malhotra and Murnighan, 2003), job satisfaction (e.g. Yang and Mossholder, 2010; Yang et al., 2009), commitment (e.g. Yang and Mossholder, 2010; Song, Kim and Kolb, 2009; Costa, 2003; Ruppel and Harrington, 2000), organisational citizenship behaviour (e.g. Colquitt et al., 2007; Ertürk, 2007; Wong, Ngo and Wong, 2006; Podsakoff, Mackenzie, Moorman and Fetter, 1990), helping co-workers (e.g. Poon, 2006) and enterprising behaviour (Costigan, Insinga, Berman, Ilter, Kranas and Kureshov, 2007; Costigan, Insinga, Berman, Ilter, Kranas and Kureshov, 2006). Finally, at a more general level, that is the national-societal level, “economists have for a long time recognized the critical role played by trust in economic performance” (Slemrod and Katuščák, 2005, p.621). Similarly, Zak and Fakhar (2006, p.413) note that “trust is an important topic to study because it is among the strongest predictors of poverty that economists have found”.

In general, research efforts attempting to understand the development and outcomes of interpersonal trust across cultures and work relationships are justifiable and critical given the important role interpersonal trust plays in producing desired outcomes at various levels (e.g. national, organisational, group and interpersonal).



### **1.1.3 Research Problems, Contributions and Rationale**

This thesis addresses three gaps or research focuses in the literature and consequently contributes to the literature in three ways. These contributions are presented within the general research context to which they contribute; cross-cultural trust, trust foci and trust outcomes.

#### **1.1.3.1 Cross-Cultural Trust**

Despite the substantial literature examining interpersonal trust in and across different national-societal cultures (findings reviewed in more detail in the literature review section of this chapter), there is a dearth of research reporting empirical findings from a Jordanian context. Only relatively few studies on trust in Jordan (e.g. Mizrachi, Anspach and Drori, 2007) and the Middle East (e.g. Redman et al., 2011; Wasti et al., 2011) were found. Thus, this thesis extends the range of national-societal cultural contexts within which trust was examined by exploring and investigating interpersonal trust within Jordanian organisations and within the national culture in which these organisations and their members operate. By doing so, the thesis provides qualitative and quantitative empirical evidence from the Jordanian context and thus, insights into a number of research themes that characterise the extant trust literature (e.g. how trust is conceptualised, the antecedents and outcomes of trust within co-worker relationship contexts).

The importance or necessity of providing an empirical understanding of interpersonal trust (its conceptualisation, development and outcomes) within a Jordanian context is attributed to a number of factors:

First, the reality of economic growth in Jordan necessitates the examination of interpersonal trust within a Jordanian context. The annual report published by the ‘Central Bank of Jordan’ on Jordan’s economic developments and performance show that economic growth during 2013 was low and slow. As stated in the report, “the real growth rate of GDP reached 2.8 percent in 2013 compared to 2.7 percent in 2012.” (Central Bank of Jordan Annual Report, 2013, p.1). To explain the positive effects of trust on economic growth and performance, Knack and Keefer (1997, p. 1253) argue that “trusting societies not only have stronger incentives to innovate and to accumulate physical capital, but are also likely to have higher returns to accumulation of human

capital”. They also argue that individuals in these high trust societies expend less to protect themselves from exploitation in economic transitions. Thus, an understanding of the meaning, development and consequences of interpersonal trust within Jordanian organisations can provide insight into how to improve trust levels within these organisations which as the arguments above suggest can provide ‘some’ contribution to improving economic growth in Jordan.

Second, due to current work trends and the type of national culture in Jordan, an understanding of the meaning and development of trust within the Jordanian cultural context is required. Ferrin and Gillesepe (2010) argue that a consequence of the ever-increasing cultural diversity in workforces within organisations –which they attribute to a number of factors such as globalisation and advances in communication technology-, is that managers are increasingly required to manage and gain the trust of individuals with foreign and unfamiliar cultural backgrounds. Implied in their statement is that in general, managers are required to understand the impact of different national cultures (that is, each national culture background present in the respective workforce) on the meaning and development of interpersonal trust within organisations and such an understanding can help them improve their management of trust within their workforces and the cultural contexts that surround these workforces.

The impact of differences in culture on the phenomena of trust is supported by some empirical evidence from the cross cultural trust literature, for example, in addition to finding empirical evidence to support the universality of some determinants and consequences of trust, Ferrin and Gillesepe (2010) also found evidence in their review of the cross-cultural trust literature to support the cultural specific nature of some of the determinants and consequences of trust.

Jordan and Arab countries have been characterised in previous research (e.g. Hofstede, 1991) as having collectivist cultures, For example; according to Hofstede (1991) Arab speaking countries were classified as having high uncertainty avoidance (68), high power distance (80), low individualism (38) and a moderately masculine culture (53). Noting that Hofstede has only examined his proposed cultural dimensions in certain Arab countries (e.g. Saudi Arabia, Egypt, Iraq, Kuwait, Lebanon), and then generalized the findings to remaining Arab countries including Jordan, Alkailani, Azzam and Athamneh (2012) replicated Hofstede’s study in order to test the robustness of the

Hofstede model in Jordan. They found Jordan's culture similar to the Arab countries previously examined in the Hofstede study, in terms of being collectivist, scoring low on individualism (27.7) and moderate on masculinity (51). However, Jordan differed from the previously examined Arab countries in terms of scoring higher on uncertainty avoidance (110) and lower on power distance (7.75). In support of the previous results in relation to collectivism, Myers (2005, p.46) notes that "cultures native to Asia, Africa, and Central and South America place a greater value on collectivism".

Thus, for both foreign and native managers in Jordanian organisations, this suggests that these managers need to understand how employees conceptualise and develop trust within Jordanian organisations and within the national collectivist culture they operate in.

Third, given the etic vs emic debate in the cross-cultural trust literature, it is necessary for managers in Jordanian organisations to understand how the meaning and development of trust within a Jordanian context compares to the depiction of trust and its development in extant trust models (e.g. Mayer et al., 1995; McAllister, 1995). That is, to improve the management of trust within their workforces, managers of Jordanian organisations need to understand which of the propositions of these models will hold in the Jordanian cultural context (etic) and which will not apply (emic). According to Ferrin and Gillespie (2010) an emic approach is likely to result in a richer understanding of trust across cultures and may produce practically useful knowledge to those who manage across cultures.

With regard to these theoretical models of trust, it can be noted that almost all of those models and their propositions have originated from western countries (e.g. USA, UK). For example; the Mayer et al. (1995) and the McAllister (1995) trust models were developed in the USA and the model of trust representing a depiction of the trust process proposed by Dietz and Den Hartog (2006) was developed within European countries (UK and Netherlands).

Dietz, Gillespie and Chao (2010) note that the cross-cultural trust literature can be split in to two types of studies: the first type is the one that gives rise to the debate on the etic (models depicting trust and its development are universally applicable) vs emic (people from varying national cultures understand and enact trust differently) nature of trust and its development. And according to these authors, the second type is that concerned with

the question on how two individual coming from two different cultures develop a trust relationship. In relation to the first type of studies, these authors note that studies adopting the etic perspective assume that trust conceptualizations, measures and models developed in western countries are adequate for the examination of trust in other cultural contexts. Zaheer and Zaheer (2006) depicted this etic (culture-general or universal) perspective as the more common view used to approach trust in the literature. Tan and Chee (2005) supported this by noting that the interest in trust has only resulted in studies mostly from the western perspective. For example, the recognition of this 'etic' assumption can be inferred from some researchers (e.g. Tan and Lim, 2009) use of one of these models (e.g. the Mayer et al., 1995 model) to examine trust within relationships in eastern countries that have collectivist cultures. Wasti et al. (2007) have proposed that the Mayer et al. (1995) theoretical model of trust is valid for understanding trust between supervisors and subordinates across cultural contexts. Yet, these same authors also acknowledge a degree of impact caused by culture by stating that "culture may reflect itself in the operationalization of the constructs, in the mean levels of propensity to trust, in the relative importance of the factors of trust in predicting trust, and finally, in the emergence of culture-specific antecedents and outcomes of trust." (p.479). According to (Ferrin and Gillesepe (2010) there is considerable evidence that trust has been effectively examined as a universal since the findings of many studies on trust across multiple cultures in addition to findings of single-country non-western studies using western based trust measures all suggest that trust can often be studied as a universal in non-US contexts.

Other researchers have criticised or questioned this assumption of universality. Noorderhaven (1999), for example, invited researchers to take a step back and consider whether the concept of trust as a psychological state is the same all over the world or if it differs between countries and cultures. Similarly, Tan and Chee (2005, p.198) adopted Noorderhaven's (1999) suggestions by noting that "instead of assuming that the concept of trust as studied in the West is generalizable over the globe, it may be more productive to explore and compare the meaning of trust as perceived in different cultural settings than to build a general model of how culture influences trust". Watsi et al. (2011) notes that research relying on trust models and measures developed in North America is criticized for being limited to constructs, operationalization's, and relationships

reflecting primarily the North American context and thus, the cross-cultural relevance of such research is uncertain.

In light of this debate and based on their comprehensive review of findings reported in the cross-cultural trust literature, Ferrin and Gillespie (2010) conclude that trust operates as a 'variform' universal where the general principle of trust holds across cultures, while some of its specific manifestations will differ across cultures.

Based on this conclusion, the empirical examination reported in this thesis (i.e. qualitative study) adopts an etic perspective in the examination of trust and its antecedents within co-worker relationships in Jordanian organisations and adopts an emic perspective in exploring the indigenous manifestations of these trust (and 'not trusting') antecedents in these contexts. Thus, this provides managers with empirical insight into the etic and emic (highlighted next) aspects of trust within Jordanian organisations.

The debate between Bachmann (2011) and Dietz (2011) in the Journal of trust research provides an example and reprising of this emic vs etic debate. This debate is summarised and emphasised in the next section (also to provide justification for conducting the research in a Jordanian context) before commencing presentation of the research problems addressed in this thesis.

The fourth factor relates to religion in Jordan. The examination of trust in Jordan (a majority Muslim country) is important because it can provide insight into the indigenous (emic) manifestations of trustworthiness factors within the Jordanian context, which is also a contribution to the cross-cultural trust literature. Ferrin and Gillespie (2010, p.77) argue that "in countries where Confucian, Hindu, or Islamic values are deeply rooted (these three religions/philosophies representing the majority of the earth's population), trust is likely to have unique and fascinating manifestations."

Finally, the insights and empirical evidence gained from examining trust within a Jordanian context fall within the realm of current interests of cross-cultural trust researchers and their recommendations for future research. For example; the qualitative study reported in this thesis goes under the category of studies interested in exploring the meaning and/or formation of trust within indigenous cultures (e.g. Wasti et al., 2011; Tan and Chee, 2005), and heeds the recommendation of Ferrin and Gillespie

(2010) that researchers carry out more emic, qualitative and/or quantitative research to understand the nature and operation of trust in different cultures around the world. Furthermore, the thesis provides empirical evidence of the etic and emic aspects of trust within the Jordanian context, thus, will be of interest to researchers concerned with or involved in the etic vs emic debate (e.g. Ferrin and Gillespie, 2010; Noorderhaven, 1999).

#### **1.1.3.1.1 The Bachmann's (2011) and Dietz (2011) Debate**

Another reason for conducting the study in a new context (i.e. Jordan) is the debate that emerged in the trust literature on the basis on which we develop trust in others (i.e. the debate between Bachmann, 2011 and Dietz, 2011 in the Journal of Trust Research). According to Dietz (2011) this debate represents a reprise of the etic vs emic debate in trust literature. In this debate, a number of notions are disputed:

First, Bachmann (2011) distinguishes between two types of trust according to the way trust is generated; interaction-based trust which he define as trust based on personal experiences between the trustor and trustee, and institution-based trust which he defines as trust that builds on institutional arrangements. Dietz (2011) notes that this depiction of trust as two distinguishable types where each is only suited to particular situations aligns with the belief that each trust type has its own origins and dynamics. Contrary to this assumption, Dietz (2011) argues that trust is based on a basic universal dynamic (i.e. starting with assessing the trustee's trustworthiness, then the decision to be vulnerable to the trustee, leading to a risk-taking behaviour) that applies to all trust encounters in the world. Thus, the examination of trust in Jordan (its conceptualisation and antecedents) can provide some empirical evidence on whether or not this trust dynamic is applicable in the Jordanian context and thus, provide some empirical support to strengthen the notion of a universal dynamic.

second, Bachmann (2011) assumes that interactional-based trust develops without any substantial role being played by the institutional arrangements while institutional-based trust is developed without any substantial role being played by the interaction between the parties involved in the trust relationship. However, Dietz (2011) argues that while there are few exceptions where interactional sources of evidence are not available and thus trust develops solely on institutional sources of evidence, in most trust encounters, evidence from both institutional and interactional sources co-exist (in addition to other

sources) in informing most trust decisions. Thus, the examination of trust in Jordan can also provide empirical evidence on whether or not these sources of evidence co-exist when informing trust decisions or not.

The third point of dispute is what Dietz (2011) refers to as an overstating by Bachmann (2011) of the impact of institutions on trust development to which Dietz (2011) counter-argues that institutional arrangements are not sufficient by their own to build trust and are deficient since these arrangements can be ignored by individuals or resented as impositions. Thus, the findings of the qualitative examination of trust (which happens to be within a Jordanian context) can also provide empirical evidence on whether or not institutional sources of evidence play a major role in trust development between co-workers.

### **1.1.3.2 Trust Research across Workplace Relationship Contexts**

Despite the extensive literature examining the antecedents and outcomes of trust within and across different work relationship contexts (reviewed in more detail in the literature review section of this chapter), the literature on trust in lateral relationships is relatively sparse compared to that on trust in vertical relationships. For example; a number of researchers (e.g. Knoll and Gill, 2011; Tan and Lim, 2009; Lau and Liden, 2008) have pointed to a major limitation in the trust literature by arguing that this literature is dominated by studies on trust in vertical relationships which almost exclusively focus on trust in leaders or managers, whilst the research on co-worker or peer trust is surprisingly sparse. This major limitation in the trust literature adds to the importance of conducting research in the area of co-worker trust. In order to address this limitation, co-worker relationships (lateral relationships) will be the general category of work relationships emphasized in this thesis when examining interpersonal trust.

Co-workers are defined as “members of an organization who hold relatively equal power or level of authority and with whom an employee interacts during the workday” (Tan and Lim, 2009, p.46). The qualitative study examines trust within co-worker relationships and the quantitative study further specifies the parties involved in the co-worker relationship to examine trust in more defined relational contexts.

To begin with, it should be noted that similar to horizontal relationships, co-worker relationships also possess the necessary conditions for trust to arise and play a role in

the relationship. Thus, this relationship (similar to horizontal relationships) provides a suitable context to examine trust within. Numerous authors (e.g. Bijlsma and van de Bunt, 2003; Rousseau, Sitkin, Burt and Camerer, 1998) propose that risk is central for trust and is an important condition for trust to arise. Furthermore, Rousseau et al. (1998) note that interdependence is another condition for trust to arise in a relationship. In any working relationship, lateral or hierarchical, “working together often involves interdependence, and people must therefore depend on others in various ways to accomplish their personal and organizational goals.” (Mayer et al., 1995, p.710). Furthermore, according to Mayer et al. (1995) there is risk inherent in working relationships. One source of risk according to Rousseau et al. (1998) is the uncertainty regarding whether the other party intends to and will act appropriately.

The importance of an understanding of trust in co-worker relationships is attributed to a number of factors:

First, examination of trust in co-worker relationships has many benefits to offer to the trust literature. For example; According to Tan and Lim (2009) the difference between hierarchical and lateral relationships is that relationships between co-workers (unlike relationships between individuals in authority within organisations) are characterised by little or no power imbalance and they portray horizontal dynamics that are absent in vertical relationships (e.g. supervisor-subordinate relationship). This, according to these authors can provide another perspective to the trust literature.

Furthermore, as will be evident from the review of literature on co-worker trust, co-worker relationships exist within a variety of contexts and work settings (e.g. teams and virtual teams, functional departments) and at different hierarchical levels within the organisation (e.g. subordinate co-workers, manager co-workers). As a result, co-worker relationships can provide researchers with a variety of work settings in which they can examine co-worker trust and thus, provide new insight into trust relationships within organisations.

Second, in previous research on co-worker trust, the importance of examining trust in lateral relationships was attributed to work trends in structuring the organisation where lateral relationships are emphasized more than horizontal relationships when structuring the organisation. According to Sheppard and Tuchinsky (1996, p.141) “hierarchy and market are being replaced with more connected, lateral forms of organization”. This



indicates that within organisations, lateral relationships are being emphasised and utilised more than hierarchical relationships. Furthermore, according to Webber (2008, p.746) “the value of trust has been demonstrated in a variety of important work relationships” (Webber, 2008, p.746). It can be argued that an increase in the importance of lateral relationships for organisations would mean also an increase in the importance of the form of trust (co-worker trust) that operates within the context of these relationships for the organisation. This argument is supported by Lau and Liden (2008) who attributed the growing importance of co-worker trust (trust within lateral relationships) for organisations to three reasons: 1- the prevalence of work teams and the interdependent nature of work tasks which require employees to trust, collaborate and coordinate with one another to accomplish organisational goals, 2- since tasks are interdependent and reward and penalty systems are often team oriented, employees who trust their co-workers to do their best are more willing to work harder themselves, knowing that their efforts will be rewarded accordingly, 3- when co-workers trust each other, they are more willing to help each other, due to their knowledge that their peers are likely to reciprocate their help in the future.

Even though this emphasis on lateral relationships in organisational structures may not be the dominant trend in Jordanian organisations (where the research is conducted), there was sufficient indication, borne out subsequently in the empirical studies of the thesis, that such forms of relationships did exist in the Jordanian context and hence could be examined. Moreover, given that placing the study in Jordan was necessary for examining trust in a non-western country, it was sensible to also carry out the examination of co-worker trust in the organisations available in Jordan (which happen to be mostly hierarchically organised firms). Finally, it can be argued that the importance of lateral relationships for organisations (whether they are mechanistically or organically structured) and consequently, the importance of examining trust within these relationships is reinforced by the empirical evidence (as will be shown in the review of literature on co-worker trust) that suggests that trust in co-worker relationships (whether in a functional departmental setting or a team/project setting) is significantly associated with a number of desired outcomes for the organisation. However, it should be noted that the conduct of the studies reported in this thesis within firms that are more hierarchically organised (rather than being laterally organised) is one of the limitations of this thesis that is discussed in the final chapter within the

limitations section. This issue is considered a limitation that requires further research because it raises a number of questions about whether or not the findings reported in this thesis would be similar or different in more laterally organised firms and whether or not the findings would generalise to laterally organised firms?

Even though there are several studies on co-worker trust, one limitation to this previous research focusing on examining trust in lateral relationship contexts (and even in vertical relationships) is its tendency to identify the parties involved in the dyadic relationships based on their organisational position. That is, these parties have typically been defined in broad terms such as supervisors; top managers; leaders; subordinates; team members and peers or co-worker employees. In the context of studies examining trust within co-worker relationships, previous studies (e.g. Tan and Lim, 2009) have focused on co-workers as employees at the same level of authority and responsibility without any further specification of the types of employees involved. This limitation makes it clear that there is a dearth of research (or none) that examines trust in or between permanent or contingent co-workers. That is, trust in co-worker relationship contexts where the parties in the relationship dyad are identified based on their employment status.

Deviating from the qualitative study reported in this thesis and also the previous research on co-worker trust, the quantitative study reported in this thesis is carried out across co-worker relationship contexts where the two parties in the relationship dyad are identified and viewed based on their employment status (e.g. employees on a permanent contract and employees on temporary or part-time contracts, also known as contingent employees) rather than their organisational positions (e.g. two 'subordinate' or two 'manager' co-workers working alongside each other) which represents a rather broader view and categorization scheme of these employees.

The examination of trust in co-worker contexts involving permanent and contingent employees is an area of research that is not yet well understood and offers many research questions that deserve researchers' attention. Thus, this thesis contributes to the co-worker trust literature a new and more specific insight into trust in co-worker relationships by examining the antecedents and outcomes of trust from a different angle. Moreover, the thesis contributes to the literature insight into whether or not employees

differentiate between their permanent and contingent counterparts in terms of trust, trustworthiness and trust outcomes.

The importance and necessity of understanding the determinants and consequences of trust in co-worker relationship dyads defined by their employment status and understanding whether or not employees differentiate between their permanent and contingent co-workers is attributed to a number of factors:

First, today's work trends in employment are changing the nature and composition of the workforce. Thus, it is necessary that managers and their organisations in addition to organisational researchers adapt to this new reality characterising the workforce. Gilder (2003) notes that a considerable part of the work force of today's organisations consists of contingent workers who perform a job for an employer on the basis of a contract of limited duration. "The need for and use of temporary employees in the workforce is continually rising" (Pane Haden, Caruth and Oyler, 2011, p. 154). Numerous researchers (von Hippel and Kalokerinos, 2012; Connelly, Gallagher and Webster, 2011; Burgess and Connell, 2006) acknowledge that in recent years there has been a substantial growth in contingent or nonstandard employment within organisations in various countries throughout the world. Furthermore, "contingent employment practices are gaining prevalence as an accepted means of staffing in organizations, mainly due to the demands of employers for labour flexibility, the existence of temporary work agencies to supply labour, and the desire of some employees for varied work experiences." (Redpath, Hurst and Devine, 2009, p.74).

Permanent employees or core workers are defined as "workers expected to display functional flexibility in return for security of employment." (Redman and Wilkinson, 2009, p.497). As for contingent employees, "The US department of labour has defined contingent workers as those who do not have an explicit or implicit contract for ongoing employment and includes workers with alternative work arrangement (e.g., temporary workers, on-call workers, leased employees, and independent contractors)" (Kraimer et al., 2005, p.389). Furthermore, this category of the workforce "typically includes part-time, temporary, seasonal, contract, agency, and self-employed workers." (Redpath et al., 2009, p.75).

Researchers agree that there are a number of benefits that employers gain from the use of contingent employees. For example, Pane Haden et al. (2011) argue that temporary

employment arrangements can reduce labour costs and supplement the organisation's core workforce. Similarly, Noe, Hollenbeck, Gerhar and Wright (2008) note that temporary employment provides organisations with the flexibility needed to operate efficiently in the face of fluctuations in demand for goods and services. Schermerhorn (2013, p.424) notes that contingent workers "provide just-in-time and as-needed work for employers who want to avoid the cost and responsibilities of hiring full-timers."

Concerning the prevalence of this trend in Jordan, a number of sources (e.g. statistical reports issued by International Labour Organisation, in addition to statistical reports issued by the Jordanian Central Bank, Ministry of Work in Jordan, the Civil Service Bureau and the Department of Statistics) were looked at to attain labour force statistics that describe the extent and spread of the phenomenon in Jordan. However, the statistical reports issued by these sources do not report directly on employment status in terms of permanent and contingent workers, instead to reflect employment status, the workforce was classified in terms of paid and unpaid employment. The categorisation used was usually as follows: paid employee, employer, self-employed, unpaid family worker and unpaid worker (these latter two are likely to be similar in many of their work relationships to those referred to as contingent workers in other studies). According to one survey by the Department of Statistics in Jordan that estimated the number of paid and unpaid employees by economic activity and the size of workforce in establishments for both public and private sectors, the total number of paid and of unpaid employees in the year 2012 and across various economic activity was 898,683 and 142,556 respectively. the survey was conducted across the following economic activities: mining and quarrying; manufacturing; electricity, gas and water supplies; construction; wholesale and retail trade and repair of motor vehicles; hotels and restaurants; transport, storage and communications; financial intermediation; real estate, renting and business activities; public administration and compulsory social security; education; health and social work; and other community, social and personal service activities.

There are a number of other factors that directly or indirectly indicate the presence and contribution of contingent workers in Jordanian organisations. Firstly, the researcher worked with many contingent workers in his previous workplace (University sector). Additionally, a basic search was conducted to find studies on contingent worker in Jordan, one study (Armstrong-Stassen, Al-Ma'aitah, Cameron and Horsburgh, 1998)

was found where the coping resources, coping strategies and job related attitudes of full-time and part-time nurses were compared and the sample was drawn from two countries; Canada and Jordan. Such employment arrangements are clearly present in Jordan, not least because their presence was reflected in this thesis when collecting the data.

Given that permanent and contingent employee do co-exist within organisations in Jordan and based on evidence from the literature (discussed later in this section) which indicates potential problems that may arise when using a blended workforce, it can be concluded that the use of a blended workforce (i.e. the permanent/contingent bifurcation) could be a major managerial issue within Jordanian organisations. As noted in the previous section concerning the contribution of this thesis to the cross-cultural trust literature, conducting this research in Jordan was necessary for the initial examination of trust in a non-western culture. Given that Jordan was chosen for this purpose, it was sensible to continue the other examinations (i.e. examination of trust within co-worker contexts where parties are defined by their employment status) carried out in this thesis also in Jordan. However, the possibility that the permanent/contingent bifurcation may not be a major managerial issue in Jordan is noted as one of the limitations of this thesis and is discussed in the limitations section in the final chapter.

More indirectly, Jordan's economic situation fits with Schermerhorn's (2013) observation that the trend of hiring contingent workers (e.g. temps, freelancers, and contract hires) is reinforced by a tight economy. According to the annual report published by Central Bank of Jordan about economic development in Jordan in 2013, the unemployment rate in Jordan increased by 0.4% from the previous year to reach 12.6% which is largely attributed to competition from low paid foreign labour (e.g. Syrian labour) and structural imbalances in the labour market.

Due to this work trend, the view towards the organisations' workforce is being transformed from a broad view (defining members in the workforce –especially subordinate employees-based on their organisational position only) to a more specific view where in addition to defining workforce members based on their organisational position (e.g. employee co-workers) it also defines them based on their types (permanent and contingent employee co-workers), thus providing a more specific and accurate depiction of the nature and composition of today's workforces. For example;

the term 'blended workforce' is increasingly being used in the literature (e.g. Hippel and Kalokerinos, 2012; Lautsch and Kossek, 2011; Kraimer, Wayne, Liden and Sparrowe, 2005; Davis-Blake, Broschak and George, 2003) to describe an organisation's workforce and is defined as "a workforce that includes regular, full-time workers employed by a company (termed permanent employees) as well as temporary workers" (Hippel and Kalokerinos, 2012, p.200). Other researchers (e.g. Way, Lepak, Fay and Thacker, 2010) used the term 'Mixed workforce'.

Given this work trend of increasingly introducing contingent workers to the workforce and the emergence of the blended workforce, and similar to what is expected and required from managers of culturally diverse workforces, it is expected that managers responsible for blended workforces will be increasingly required to manage the trust of the employees in these blended workforces where there is diversity in terms of employment status. Thus, in order to better manage and facilitate trust within these work relationships among permanent and contingent co-workers and to secure the full benefits of trust in a blended workforce, managers are required to have a better understanding of the determinants and outcomes of trust that apply to each co-worker context in a blended workforce. Additionally, it is equally important for managers to understand whether or not these employees differentiate between their permanent and contingent counterparts in terms of the levels of trust, trustworthiness perceptions, and trust outcomes directed towards these co-workers. According to Pane Haden et al. (2011, p.145) "a more complete understanding of the attitudes and behaviors of the types of workers employed in modern organizations will help leaders manage their workforces in more effective ways".

This work trend also makes it necessary that researchers adapt their view of the workforce to reflect the changes in the nature and composition of today's workforces. Viewing members of the workforce in terms of their employment status reflects a more accurate depiction of the range of co-worker relationships existing in the workforce and provides a more specific description of the nature and composition of today's workforces than that provided when the workforce (mostly subordinates) is viewed in terms of organisational position. Consequently, any examinations of co-worker trust must account for this 'blended' view of the workforce which can potentially provide a more accurate and specific understanding of co-worker trust and thus, is more useful, informative and relevant to managers who perceive their workforce as a blended one.

Viewing co-workers according to their employment status can result in six different co-worker relationship contexts that trust can be examined within as follows: the relationship between 1) a permanent employee and another permanent co-worker, 2) a permanent employee and a contingent co-worker, 3) a contingent employee and a permanent co-worker, 4) a contingent employee and another contingent co-worker, 5) an employee in general (that is, regardless of employment status) and a permanent co-worker and 6) an employee in general and a contingent co-worker. This particular view of the parties involved in the co-worker relationship provides trust researchers with two new referents of trust (that have been overlooked in previous research examining the antecedents and outcomes of trust) and makes it possible to treat both the permanent employee and the contingent employee as either trustors or referents of trust or both within a working relationship. This thesis will use this role categorisation in order to extend the scope of trust research to include relationships among permanent and contingent co-worker.

Second, given that this study takes place within a blended workforce context, the well documented deterioration of the workplace environment caused by using a blended workforce, that is, the negative effects of workforce blending makes it necessary for managers to understand how to facilitate trust in co-worker contexts within this blended workforce in order to address the challenges of workforce mixing. Such an understanding is also important because according to (von Hippel and Kalokerinos, 2012, p.201) “this deterioration may offset the benefits that organizations are hoping to reap through the use of temporary employees.”.

Researchers examining the negative consequences of workforce blending have provided considerable arguments and empirical evidence suggesting that these negative consequences are a live concern inside organisations.

With regard to arguments, researchers argue that there may be disadvantages of employing contingent employees, for example, “when temporary workers are used, full-time employees may make attributions for why the organization is relying on temporaries, and these attributions may result in full-timers viewing temporaries as a benefit or a threat.” (Kraimer, Wayne, Liden and Sparrowe, 2005, p.389).

Literature concerned with the consequences of using contingent employees in organisations has pointed to some of the potential challenges in the relationship between

permanent and contingent employees in addition to the negative consequences of employing contingent employees to work alongside permanent employees. For example, “because of their job insecurity, contingent workers may purposely avoid sharing any valuable or rare knowledge with their permanent colleagues, in order to encourage their employers to engage their services for a longer period of time.” (Connelly and Gallagher, 2004, p.971-972). Von Hippel and Kalokerinos (2012) speculate that permanent employees may be unwilling to help temporary employees improve their performance so that they will not replace them. According to Connelly and Gallagher (2004) even if contingent employees were willing to share information with permanent employees, these ‘non official’ members of an organisation may face difficulty in having their knowledge accepted by permanent employees and in establishing their credibility. Noe et al. (2008) state that there is usually tension between an organisation’s full time employees and its temporary employees since some full time employees perceive temporary employees as a threat to their own job security and this may lead to low levels of cooperation and in some cases, even sabotage if not managed properly. Connelly, Gallagher and Wilkin (2014, p. 108) state that “conflicts can arise between temporary workers and permanent employees if the latter are unwilling to provide assistance or engage in other interpersonally aggressive behaviours towards their temporary colleagues.”. Von Hippel and Kalokerinos (2012, p.201) sum up the situation: “the presence of temporary workers can lead to deterioration in the workplace environment..

There is also empirical evidence to support the argument that a blended workforce can lead to deterioration in the workplace environment such as worsening relations between co-workers and having negative effects on permanent workers in terms of worsening their relations with management and the organisation, reducing their intentions to remain at their jobs, reducing their loyalty to the organisation in addition to negatively impacting their other attitudes.

With regard to worsening relations between co-workers, there is empirical evidence to support the argument that there are conflicts and tensions between permanent and contingent employees. For example; In Geary (1992) case study, he found that as a result of temporary employees working alongside permanent employees, a certain animosity developed between the two groups in addition to tensions and conflicts. As one example, Geary (1992) reported that permanent workers were ordering temporary



co-workers about unnecessarily and in occasions the temporary workers would backlash telling permanents 'to get lost!'. In her case study, Smith (1994) found and reported tensions between permanent and temporary employees due to permanent employees believing that temporary workers do not care about the work they produce and whether it meets the standards set, and thus compelling permanent employees to deal with the problems and inconsistency in temporary workers performance, furthermore, permanent workers were concerned about the efficiency of their work being undermined due to working alongside temporary workers. Chattopadhyay and George (2001) found that in temporary-worker-dominated-groups, work status dissimilarity among employees (temporary and internal workers) had a negative effect on internal (permanent) workers' trust in their peers and attraction toward those peers. Moreover, they found that these effects were more negative for internal workers than for temporary workers. Broschak and Davis-Blake (2006) found that heterogeneity in employment arrangements (using both standard and nonstandard or temporary employees) had a significant negative effect on relations between co-workers.

In relation to the impact of blended workforces on permanent employees' turnover intentions, Davis-Blake et al. (2003) found that the use of temporary workers increased standard employees' interest in leaving their organisation. Broschak and Davis-Blake (2006) found that heterogeneity in employment arrangements had a significant positive effect on turnover intentions. Way et al. (2010) found that among firms with a mixed workforce (a sample of 90 firms), there is significant positive relationship between the use of contingent employees to reduce labour costs and permanent employees' withdrawal behaviours (absenteeism and turnover).

Empirical evidence also suggests that blended workforces negatively impact permanent employee's relations with managers and trust in their organisation. Pearce (1993) found that employees that work with contractor co-workers had lower levels of trust in their organisation than employees in employee-only work units. Davis-Blake et al. (2003) found that the use of temporary and contract employees had a negative impact on standard employees' perceptions of relations between managers and employees in the workplace. Broschak and Davis-Blake (2006) found that heterogeneity in employment arrangements had a significant negative effect on relations between supervisor and subordinate.

Furthermore, there is also evidence to suggest that the attitudes of permanent employees may be negatively affected by the use of temporary workers. Chattopadhyay and George (2001) found that in temporary-worker-dominated-groups, work status dissimilarity had a negative effect on internal workers' altruism. Davis-Blake et al. (2003) found that the use of temporary employees decreased standard employees' loyalty. Broschak and Davis-Blake (2006) found that heterogeneity in employment arrangements had a significant negative effect on work-related helping behaviours. von Hippel and Kalokerinos (2012) found that when permanent employees felt threatened by temporary co-workers, their behaviour (interpersonal helping) towards these temporary co-workers became unfavourable.

These 'potential' "disadvantages to employing temporary workers need to be overcome to effectively use this source of labor." (Noe et al., 2008, p.196). This thesis proposes that the fostering and engendering of trust between permanent and contingent co-workers can be one way of contributing to meeting the challenges that arise from the use of a blended workforce. Thus, adding to the importance of examining co-worker trust with a blended workforce context.

Theoretical arguments in addition to empirical evidence from the trust literature all support the notion that co-worker trust has a positive impact on improving workplace environments characterised by these disadvantages that are associated with introducing contingent employees to the workforce.

For example; researchers argue that "co-operation has always been important in organisations" (Tyler, 2003, p. 556), and since low levels of cooperation can be a result of the tension between the two employee categories (as noted earlier by Noe et al., 2008), in this type of situation, "trust is a key because it enables co-operation." (Tyler, 2003, p.556). Thus, it is important to examine trust and identify its antecedents and outcomes within co-worker contexts involving permanent and contingent employees.

Empirical evidence also supports the positive impact of co-worker trust for blended workforces. For example; Redman et al. (2011) found that trust in co-workers had a significant negative impact on intention to quit. Ferres, Connell and Travaglione (2004) found that trust in co-worker was a significant predictor of lowered turnover intentions.

There is also empirical evidence to suggest a positive effect on relations between managers and employees and on trust in organisation and managers. For example; Han (2010) found that trust in peers has a significant and positive effect on Leader-Member Exchange (LMX). Tan and Lim (2010) found that trust in co-workers is significantly and positively related to trust in organisations which also fully mediated the relation between trust in co-workers and organisational commitment. Redman et al. (2011) found that trust in organisation fully mediated the significant negative relationship between trust in co-workers and intention to quit. Knoll and Gill (2011) found a significant positive relationship between trust in peer and trust in supervisor.

Finally, empirical evidence also supports the positive effects of co-worker trust on employee attitudes. McAllister (1995) found that affect-based trust in peers was positively associated with interpersonal citizenship behaviours towards the peer. Settoon and Mossholder (2002) found that trust in a co-worker was indirectly related to person-focused ICB through empathic concern. Finally, Redman et al. (2011) found that trust in co-workers was positively related to OCB-I, that is altruism directed towards individuals.

The final factor relating to the importance of examining co-worker trust within a blended workforce relates to researcher's interests. The quantitative study will be of interest to researchers examining trust in different and new relational contexts. Trust research has always tended towards defining and specifying the parties involved in the dyadic relationship to reflect the fact that any individual will have multiple and different relationships with other parties and thus, differences in the levels of trust, its antecedents and outcomes across different relationships can be detected. For example; according to Redman et al. (2011) trust has been conceptualised as being foci-specific where ones' trust in others varies according to the individual with whom there is interaction with. What this suggests is that this specification of the involved parties (especially the trust foci) in the relationship helps identify the differences in trust levels across different relationships with others. This also helps identify differences across multiple relationships in terms of the relative importance of trust antecedents to predicting trust (e.g. Knoll and Gill, 2011) and in terms of trust outcomes (e.g. Redman et al., 2011). Viewing the workforce as a blended one can result in identifying new trust foci (e.g. permanent and contingent trustees) that were not examined in previous research. Thus, provide new insight into trust relationships.

In addition, similar to adopting an etic approach to examining trust across different national-societal cultures, it can be noted that part of the trust research has also adopted an etic approach in examining trust in different work relationship contexts. For example; the applicability of the Mayer et al. (1995) integrative model of organisational trust have been examined in different relationship contexts within the organisation (e.g. Knoll and Gill, 2011; Tan and Lim, 2009; Colquitt et al., 2007; Gill et al., 2005). Furthermore, within this particular stream of research, there was also interest in identifying the relative importance of each trust antecedent proposed by Mayer et al. (1995) to predicting trust in the respective trustee. Some studies (e.g. Knoll and Gill, 2011) have even compared the relative importance of these antecedents across different work relationship contexts.

Given that this study adopts this trust model to examine the antecedents of trust among permanent and contingent colleagues, it will be of interest to those researchers since the model will be empirically tested in new relational contexts. In addition, the study compares the relative importance of trustworthiness factors across the different relationships among permanent and contingent co-workers. This is a further valid area of research since according to Knoll and Gill (2011) many researchers have hypothesized that the relative strength of the relations between trustworthiness factors and trust might vary according to the referent type.

Furthermore, such a comparison is needed because it may potentially provide contributions in terms of methodology. Studies that tested the applicability of the Mayer et al. (1995) model to the context of co-worker relationships have reached inconclusive evidence regarding the relative importance of the trustworthiness factors proposed by this model for predicting trust in a co-worker. For example; some studies (e.g. Knoll and Gill, 2011; Wasti et al., 2011) found that ability, benevolence and integrity were all equally important for trusting a co-worker. Yet other studies (e.g. Tan and Lim, 2009) found that only benevolence and integrity were related to trust in a co-worker. Such a finding shows that benevolence and integrity may have a higher relative importance than ability in predicting trust in co-workers. Furthermore, the same study of Wasti et al. (2011) which compared two samples of employees from two different countries (China and Turkey) found that for the Turkish sample, benevolence was the only important trustworthiness factor for predicting trust in a peer.

One of the reasons that may explain part of this inconsistency in findings is that these studies were conducted in different countries. For example; Knoll and Gill's (2011) study was conducted in Canada, Wasti et al. (2011) in China and Turkey and Tan and Lim (2009) in Singapore, which includes a Chinese population. Given the diversity of the cultures and nationalities within which these studies were conducted, the inconsistent findings may suggest that the broad cultural and national backgrounds of the participants may have influenced the strength of the factors' impact. For example, one of the explanations offered by Tan and Lim (2009) for the result they found was the nationality of the sample used for the study (Chinese). The authors argued that Chinese people greatly respect their traditional values which stress benevolence and morally correct codes of conduct rather than mastery, therefore suggesting that Chinese people may not consider the ability of the referent to be a crucial factor. This is supported by Wasti et al. (2007) who hold that culture may reflect itself in the relative importance of the trustworthiness factors in predicting trust.

However, researchers argue that there are factors (other than the cultural setting) that may impact the relative strength of these factors. For example; with regard to the relative importance of the three trustworthiness elements, it is argued that "each of these elements has unique and combined influences on trust, and its relative importance largely depends on the referent and situation" (Tan and Lim, 2009, p.49). Previous studies which have considered co-workers have typically not distinguished between permanent and contingent co-workers but have dealt with one category labelled 'co-workers' when examining the relative importance of these factors to predicting trust in a co-worker. Thus, findings of the examination of trust and the relative importance of its antecedents within these new co-worker contexts will provide empirical evidence that may contribute to solving the issue of inconclusive results since future research can replicate this study design to test the validity of these findings.

### **1.1.3.3 Nature of Trust Outcomes**

Despite the wide literature examining the outcomes of trust, there is a dearth of (or relatively less) research examining trust outcomes that are negative in nature. As will be evident from the review of literature on co-worker trust later in this chapter, researchers' efforts have been focussed on linking trust to positive outcomes and largely ignoring outcomes of a negative nature such as antisocial work behaviours. There are a number

of studies that link trust to negative outcomes (these are reviewed in the trust in co-worker section of the literature review). However, these studies are few and the link between trust and antisocial work behaviours has not been empirically established in co-worker relationships among permanent and contingent employees.

Another limitation to the literature on trust outcomes is that even though the relationship between trust in co-workers and organisational/interpersonal citizenship behaviours was empirically established in a number of studies (e.g. Redman et al., 2011; Settoon and Mossholder, 2002; McAllister, 1995), none the less, there is currently no empirical evidence of this link in the context of permanent and contingent co-worker relationships. Consequently, there is also a dearth of research that examines both positive and negative outcomes of trust in the same study.

This thesis contributes to the co-worker trust literature empirical insight into the relationship between trust in the permanent and contingent co-worker and both positive and negative behaviours towards each of the two trust referents. The positive outcomes include task-focused and person-focused interpersonal citizenship behaviours while the negative outcomes include antisocial work behaviours.

Person-focused ICB “provides for self-esteem maintenance and deals with problems of a more personal nature” (Settoon and Mossholder, 2002, p. 256), examples include: “listening and being accessible, counselling, and demonstrating a concern for others by reassuring them of their worth.” (Settoon and Mossholder, 2002, p. 256). As for task-focused ICB it “involves the resolution of work-related problems of a less personal nature and deals with organization-based issues” (Settoon and Mossholder, 2002, p. 256), examples include “behaviors such as providing work-related advice, offering new perspectives on work problems, supplying factual information and direct assistance, and assuming responsibility for solving problems.” (Settoon and Mossholder, 2002, p. 256).

Antisocial work behaviours have been defined as “any behaviour that brings harm, or is intended to bring harm, to an organization, its employees, or stakeholders.” (Giacalone and Greenberg, 1997, p. vii). Abdul Rahim and Nasurdin (2008) noted that researchers have used different terminologies to represent these deviant behaviours, such as organisational misbehaviour, organisational retaliation behaviour, antisocial behaviour, counterproductive behaviour and workplace aggression. Furthermore, Thau, Crossley, Bennett and Sczesny (2007) note that antisocial work behaviour is considered the broad

construct that subsumes under it a number of individual constructs (organisational retaliatory behaviours, workplace incivility, counterproductive work behaviours and workplace deviance). For example, 'employee deviance' in the workplace refers to the "voluntary behavior that violates significant organizational norms and in so doing threatens the well-being of an organization, its members, or both" (Robinson and Bennett, 1995, p.556). This definition is similar to that of antisocial work behaviours. Furthermore, a number of definitions have been presented for workplace aggression, for example; it has been defined as "behaviors performed by individuals in order to harm others with whom they work or previously worked" (Baron and Neuman, 1998, p.446), incidence of workplace aggression is defined as "the frequency of acts by employees to harm (actual or potential) others with whom they work or the employing organization" (Douglas and Martinko, 2001, p.548). These definitions are also similar to that of antisocial work behaviours. According to Thau et al. (2007) all these terminologies for antisocial work behaviour have three common elements; they express the notion that these behaviours are 1) norm-breaking, 2) intentional, and 3) show a lack of concern for the interests of their targets, often in favour of one's own interest and benefit.

A typology of workplace deviant behaviour was provided by Robinson and Bennett's (1995) study which distinguished between two types: 1) organisational deviance which "encompasses deviant behaviour targeted toward the organization" (Abdul Rahim and Nasurdin, 2008, p.214), and 2) interpersonal deviance which "encompasses deviant behaviour targeted toward individuals" (Abdul Rahim and Nasurdin, 2008, p.214). According to Robinson and Bennett (1995) organisational deviance is itself classified into two categories; 1) property deviance (e.g. sabotaging equipment, lying about hours worked, stealing from company), and 2) production deviance (e.g. leaving early, taking excessive breaks, wasting resources, and intentionally working slowly), as for interpersonal deviance, it is also further classified in to two categories; 1) personal aggression (e.g. sexual harassment, verbal abuse, stealing from co-workers, and endangering co-workers), and 2) political deviance (e.g. showing favouritism, gossiping about co-workers, blaming co-workers, and competing non beneficially).

Since this thesis focuses on the context of co-worker relationships, organisational deviance directed towards the organisation will not be recorded and only interpersonal deviance behaviours directed towards the co-worker will be examined and measured.

The empirical examination of the relationship between trust in permanent and contingent colleagues and its outcomes (Interpersonal citizenship behaviour and antisocial work behaviours towards the respective colleague) is warranted due to a number of factors:

First, in relation to interpersonal citizenship behaviours, Podsakoff, MacKenzie, Paine and Bachrach (2000) recommend that future research should attempt to identify the unique antecedents of different forms of citizenship behaviour. This is important because according to Settoon and Mossholder (2002) researchers have noted that organisational citizenship behaviours include several different but related types of behaviours to which employees may selectively choose which behaviour to engage in rather than engage equally in all. This study empirically examines the impact of trust in previously unexamined referents (permanent and contingent co-workers) on two forms of interpersonal citizenship behaviours. Thus, this study contributes to the effort of linking different types of citizenship behaviours to new antecedents.

Second, in relation to antisocial work behaviours, as evident in the previous section, both empirical evidence and researchers arguments support the notion that animosity and tensions between permanent and contingent co-workers can be one of the ‘possible’ negative consequences of using a blended workforce. As a result, it is important to understand how to counteract and inhibit these antisocial work behaviours (if they occur) within blended workforces by empirically examining their links to any inhibiting factors such as trust.

Third, regardless of the nature of the workforce (blended or not), researchers note that deviant and unethical behaviours are an increasing occurrence within organisations and have negative consequences for organisations. For example, according to Mayer, Kuenzi and Greenbaum, (2010, p.7) “there are alarming statistics regarding the amount of unethical behaviour that occurs within organisations”. Furthermore, “in recent years, the frequency and severity of workplace aggression has been brought to the fore” (Inness, LeBlanc and Barling, 2008, p.1401). According to Robinson and Bennett (1995, p.557) “deviant behaviour also has the potential to harm an organization, its members, or both”. Empirical evidence suggests that these deviant and counterproductive behaviours lead to a number of negative consequences for the organisation and its members. For example, Rogers and Kelloway (1997) found that



workplace violence predicted fear of future violence which in turn predicted psychological well-being, somatic symptoms and quit intentions. LeBlanc and Kelloway (2002) found that an employee's experience of co-worker-initiated aggression had direct negative effects on his/her emotional and psychosomatic well-being and affective commitment to the organisation.

Giacalone and Greenberg (1997) notes that the study of antisocial behaviour has received little attention from management scholars compared to the attention received from other social scientists. Thau et al. (2007) view this as an important area of research since, compared to knowledge about how trust influences pro-organisational behaviours, less is known about how trust may influence behaviours that harm the organisation and its members. As a result, the examination of the link between trust and antisocial work behaviours is critical and timely.

#### **1.1.4 Research Questions**

The limitations in published research identified in the previous section are expressed through a number of research questions. Two studies are carried out to address these research questions. The first is qualitative in nature and will address the first two questions. The second study is quantitative in nature and will address the remaining questions. The research questions addressed by this thesis are as follows:

- 1- How do employees working in the context of the selected Jordanian organisations define interpersonal trust in comparison with existing operationalizations of trust?
- 2- What are the antecedents of co-worker trust and distrust (not trusting) within the selected Jordanian organisations in comparison with existing frameworks of trust and what are the localised manifestations of the antecedents of trust and distrust within Jordanian organisations?
- 3- In terms of the six co-worker relationship contexts described earlier, are the antecedents (trustworthiness factors and propensity to trust) suggested by the Mayer et al.'s (1995) integrative model of organisational trust applicable to these contexts of co-worker relationships? In other words, what are the antecedents of trust within each one of the six co-worker relationship contexts?

- 4- What is the relative importance of trustworthiness factors in predicting trust in the respective trustee within each of these six co-worker relationship contexts? And consequently, are there any differences among these six co-worker relationship contexts in terms of the relative importance of the three trustworthiness factors (ability, benevolence and integrity) in predicting trust towards the respective co-worker? In other words, does the relative importance of these trustworthiness factors change depending on the type of trustor (permanent or contingent) and the type of trustee (permanent or contingent)?
- 5- What are the effects of trust in the respective trustee within these six co-worker relationship contexts on antisocial work behaviours and interpersonal citizenship behaviours (person-focused and task-focused) directed towards the respective trustee?
- 6- Do permanent and contingent employees differentiate between their permanent and contingent co-workers based on employment status? What are the effects of in-group and outgroup categorization based on work status (permanent, contingent) on the perceptions, attitudes and behaviours towards both permanent and contingent co-workers. That is, are there any statistically significant differences between the levels of perceived trustworthiness, trust, antisocial work behaviours and interpersonal citizenship behaviours exhibited towards permanent co-workers and those exhibited towards contingent co-workers?

The remainder of this chapter proceeds as follows: first, a literature review is provided where trust and distrust are defined and the different theoretical models of trust development are reviewed to highlight the trust model that is adopted by this thesis to explain and theorize the relationships between trust and its antecedents. In addition, the literature on cross-cultural trust and that on co-worker trust are reviewed. Second, the quantitative study is anchored in the theoretical propositions provided by the Mayer et al.'s (1995) trust model, social exchange theory and social identity theory/self-categorization theory. The Mayer et al.'s (1995) trust model is used to explain the relationship between trust and its antecedents. Social exchange theory is used to theorize the relationship between trust and individual level outcomes in the form of positive and negative behaviours towards the respective trustee (permanent or contingent). Finally, principles of social identity theory are used to explain why

permanent and contingent employees are expected to differentiate between their permanent and contingent counterparts in terms of trust, trustworthiness, antisocial work behaviours and interpersonal citizenship behaviours and by doing so providing an empirical test on the validity of employment status as a categorising variable used by permanent and contingent employees to identify their in-group and out-group members.

Using these theoretical foundations along with some of the empirical evidence presented in the literature review, a number of hypotheses are then generated and a conceptual model is presented. The chapter concludes with three sections: the first describes the philosophical assumptions underpinning the work presented in this thesis. The second provides a brief description of the methodology adopted to address the research's aims and questions. The final section illustrates the thesis outline by providing a descriptive summary of the contents of each chapter in the thesis before providing a summary of this chapter and introducing the next chapter.

## **1.2 Literature Review**

### **1.2.1 The Nature of Interpersonal Trust**

In this section, trust is defined before justifying the decision to adopt the Mayer et al. (1995) integrative model of organisational trust in this thesis to theorise the relationships between trust and its antecedents. This justification is developed based on a review of a number of different theoretical models developed to examine trust within organisations. This review assesses these models in relation to a number of criteria.

#### **1.2.1.1 Definition of Trust**

One of the issues receiving a great deal of attention in the trust literature is the nature and conceptualization of trust. A number of trust scholars (e.g. Dietz and Den Hartog, 2006; Costa 2003; Dirks and Ferrin, 2002) point to the variety of different operational definitions and conceptualizations of trust. According to Costa (2003) there is a lack of agreement in defining trust. Dietz and Den Hartog (2006) note that the precise nature of trust remains contested.

Nevertheless, Costa (2003) states that even though these definitions reflect differences of opinion, there are a number of issues that are common across them. For example: a

number of authors (e.g. Colquitt et al., 2007; Rousseau et al., 1998) point out that the intention to accept vulnerability and positive expectations are two components that are present in many conceptualizations of trust and are critical in defining trust.

Trust is defined as “the willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party” (Mayer et al., 1995, p.712). Similarly trust is defined as “a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another.” (Rousseau et al., 1998, p.395).

Ferrin, Bligh and Kohles (2008) note that the Mayer et al. (1995) definition of trust is conceptually almost identical to the Rousseau et al. (1998) definition. This is clear since both definition highlight the element of willingness or intention to accept or be vulnerable to the other party. Moreover, they both highlight another element which is that this willingness or intention to be vulnerable is based on positive expectations regarding the behaviour of the other party.

These two similar definitions of trust (i.e. Mayer et al., 1995; Rousseau et al., 1998) are adopted in this thesis for several reasons: first, according to Saunders, Dietz and Thornhill (2014) there is now general agreement on the definition of trust which is outlined in similar terms in the definitions provided by Mayer et al. (1995) and Rousseau et al. (1998). Second, according to Dietz et al.(2010) the Rousseau et al. (1998) definition of trust highlights the two fundamental components of trust that are common in earlier definitions of trust: the willingness to be vulnerable in a situation of risk and confident positive expectations. Finally, the definition is applicable to the relationship contexts examined in this thesis since according to Mayer et al. (1995) their definition of trust is applicable to a relationship where the other party is identifiable and is perceived to act or react with volition toward the trustor.

As indicated in the introduction of this chapter, the qualitative study explores the antecedents of trust and also those of distrust in a co-worker. Thus, distrust is also defined. A number of trust scholars (e.g. Schoorman, Mayer and Davis, 2007; Saunders et al., 2014) note that the definition of distrust and its relation to trust is an area of contention that has sparked discussions and debates within the trust literature. This debate (e.g. Lewicki, McAllister and Bies, 1998; Schoorman et al., 2007; Saunders et

al., 2014) has focused on determining whether trust and distrust are two separate constructs or are two opposite ends of a single continuum.

For example Lewicki et al. (1998) argued that trust and distrust are two separate but linked constructs where each construct has its own separate antecedents thus proposing that the two constructs are not opposite ends of a single continuum (i.e. low trust is not the same as high distrust and high trust is not the same as low distrust) and that it is possible for trust and distrust to co-exist within the same relationship. To support their view, Lewicki et al. (1998) argue that given the contemporary view of relationships as multifaceted and multiplex, there is a need to view relationships as complex multidimensional constructs rather than viewing them as unidimensional. As for McKnight and Chervany (2001), they reviewed the literature on definitions of trust and distrust and developed two separate conceptual models for each construct. They note that the distrust constructs are defined as separate and opposite from trust constructs.

Schoorman et al. (2007) adopted the opposite view to that of Lewicki et al. (1998), thus proposing that the two constructs are opposite ends of the same continuum. To support their view, Schoorman et al. (2007) argued that the definition of distrust in Webster dictionary indicate that trust and distrust are opposites and that distrust is a lack of trust. Schoorman et al. (2007, p.350) also argue that their “definition of trust-willingness to take risk (i.e., be vulnerable) in a relationship- means that at the lowest level of trust, one would take no risks at all.”. Furthermore, Schoorman et al. (2007, p.350) argue that in their trust model, they note that the trust antecedent ‘ability’ is domain specific and thus, only this allows for trust and distrust to co-exist in the same relationship (without the need to view trust and distrust as separate and different constructs) since “the difference in the level of trust within the same relationship is a function of the different abilities across different domains.”. Moreover, Saunders et al. (2014) note that Schoorman et al. (2007) view on the relation between the two constructs suggests that in general, feeling both distrust and trust toward an individual is unlikely and unsustainable.

In relation to conceptual models for trust and distrust developed by McKnight and Chervany’s (2001), Schoorman et al. (2007) note that the two models are identical suggesting that perhaps there is no need for both models. Saunders et al. (2014, p.643) support this criticism by noting that in McKnight and Chervany’s work “the two

concepts are portrayed, puzzlingly, as functional equivalents and opposites”. Furthermore, Schoorman et al. (2007, p.350) add that since McKnight and Chervany’s (2001) concluded that trust and distrust are opposite to each other, “there is little added value to treating them as separate constructs.”

lastly, Saunders et al. (2014) used structured card sort and in-depth interviews to collect data from a sample of 56 participants to provide the first empirical test on whether trust and distrust are symmetrical (opposites and cannot co-exist) or whether they occur simultaneously as separate constructs. Their findings suggested that trust and distrust rarely occur simultaneously with regard to a single trustee thus providing considerable support to Schoorman et al.’s view of the two constructs since the findings imply that trust precludes the occurrence of distrust and vice-versa. These findings were from 44 participants who felt either trusting or distrustful. However their findings also provided support to Lewicki et al.’s (1998) view since 11 participants felt neither trusting nor distrustful and only one case felt both trust and distrust simultaneously which the authors note that they were both felt rather weakly by the participant and appeared to have distinct contextual stimuli.

For the purposes of the qualitative study, the view on trust and distrust provided by Schoorman et al. (2007) is adopted (i.e. trust and distrust are two opposite ends of the same continuum) for several reasons; first, the considerable empirical support provided by Saunders et al. (2014) to Schoorman et al.’s (2007) argument. Second, Schoorman et al.’s (2007) provides a convincing argument that trust is domain specific which can explain why trust and distrust (e.g. low trust) can co-exist in the same relationship without having to separate the two concepts. According to McKnight and Chervany (2001, p.45) “high trust and distrust would not simultaneously exist if interpersonal trust constructs were defined as situation-specific, because it is difficult to imagine both highly trusting and highly distrusting a person regarding the same situation.”.

#### **1.2.1.2 Models of Interpersonal Trust Development (Review and Critique)**

In this section, a number of well-known theoretical models developed to examine the antecedents and outcomes of trust are assessed and critiqued (in terms of their suitability for the purposes of this thesis) based on a number of criteria. This critique was conducted to arrive at the model that is adopted in this thesis to theorise the relationships between trust and its antecedents and to conceptually define the constructs

of trust and its antecedents. Specifically, the models were assessed and critiqued based on the following criteria; their operationalization of trust, their applicability across levels of analyses and the range of antecedents they included in the model, and finally, the criticisms of available measures developed to test these models.

#### **1.2.1.2.1 Operationalization of trust**

A general criticism that applies to most trust framework in addition to empirical articles on trust is what Ferrin et al. (2008) refer to as conceptual confusion in the trust literature about what concept(s) the 'trust' label should be applied to. Ferrin et al. (2008, p. 174) further note that based on a review they did on recent empirical articles on trust (2000 to 2006 inclusive), they discovered that "the 'trust' label was used to refer to operational definitions of trust as: (1) a perception of another's perceived ability, (2) a perception of another's perceived integrity, (3) positive confident expectations, (4) a willingness to accept vulnerability and (5) trusting actions.

According to Costa (2003) these different conceptualisations and operational measurements of trust have had a significant effect on research on trust because they can lead to inconsistencies across research findings. Another problem caused by the lack of agreement on the conceptualisation of trust is what Ferrin et al. (2008) described as a dilemma they faced while writing their study, which was that they had to choose terminology to refer to trust (the focal concept in their study) that is either inconsistent with terminology used by the extensively cited model proposed by Mayer et al. (1995) or inconsistent with terminology used by other researchers.

Thus, to avoid contributing to the problem of inconsistent findings across trust research and to avoid choosing trust operationalization's that are conceptually and empirically distinct from those adopted by a considerable portion of the trust literature, it is important to adopt a trust model that uses operationalization's and terminologies that are widely accepted and acknowledged by trust researchers. This is based on Ferrin et al. (2008, p. 174) recommendation that "the trust field needs to coalesce around a common terminology". To achieve this end, differences and similarities between trust models in terms of their operationalization's of trust and other related constructs are illustrated using examples before highlighting the model that is widely acknowledged by trust researchers.

The different operational definitions of trust noted by Ferrin et al. (2008) in addition to the lack of agreement and subsequent confusion about what constitutes trust is apparent when overviewing the trust conceptualisations adopted by some of the theoretical models/framework (e.g. Dietz and Den Hartog, 2006; Payne and Clark, 2003; McKnight, Cummings and Chervany, 1998; Sheppard and Sherman, 1998; Mayer et al., 1995; McAllister, 1995) developed to explain the phenomenon of interpersonal trust and to identify its antecedents and outcomes in an organisational context.

For example, in relation to the first conceptualisations of trust to appear in the literature, Lewicki et al. (2006) note that the behavioural tradition of trust, which represented the earliest attempts to conceptualize trust, viewed trust as a rational choice behaviour and included cooperative behaviours which were accepted as an observable manifestation of trust. Lewicki et al. (2006) also note that later models of interpersonal trust focused on the cognitive and affective (psychological) processes or states that represent trust.

Some models and conceptualisations (e.g. Mayer et al., 1995; Rousseau et al., 1998) categorized under what Lewicki et al. (2006) referred to as the psychological tradition towards trust, viewed trust as a psychological state where cognitive and/or affective processes are emphasized. As stated earlier in the section defining trust, Mayer et al. (1995) conceptualised trust as only a willingness to be vulnerable to the trustee which is 'based' on positive expectations. This is supported by the fact that Mayer et al. (1995) clearly differentiated and separated between trust (i.e. willingness to be vulnerable) and its trustworthiness (i.e. perceived ability, benevolence and integrity of the trustee) and propensity to trust antecedents in addition to separating trust from trusting actions (i.e. risk taking behaviours). Mayer et al. (1995) described trust as a "willingness" to assume risk and trusting behaviours as actually assuming the risk. They argue that there is no risk taken when an individual is willing to be vulnerable but risk exists in the behavioural manifestation of this willingness to become vulnerable, and that this crucial differentiation highlights the significance of clearly distinguishing between trust and its outcomes.

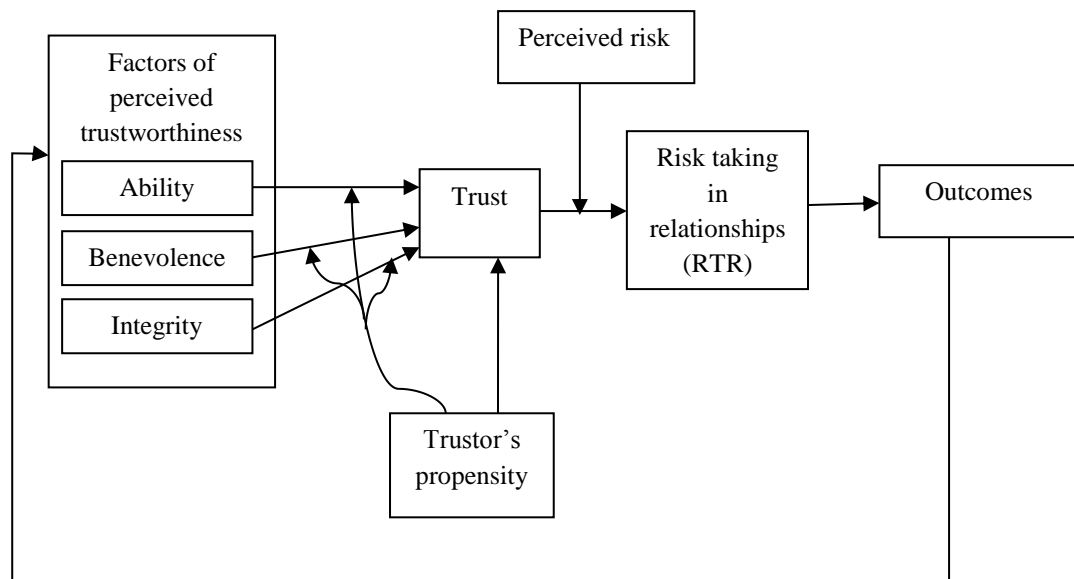
Furthermore, in their integrative model of organisational trust (figure 1.1) Mayer et al. (1995) clearly differentiated between trust and similar constructs such as confidence, predictability, and most importantly cooperation by arguing that an individual can cooperate with someone he/she does not trust "if there are external control mechanisms



that will punish the trustee for deceitful behaviour, if the issue at hand doesn't involve vulnerability to the trustor over issues that matter, or if it's clear that the trustee's motives will lead him or her to behave in a way that coincides with the trustor's desires" (Mayer et al., 1995, p.713). In proposing this model, Mayer et al. (1995) deviated from the early conceptualizations of trust as solely a rational choice behaviour (e.g. cooperative behaviours).

This model has a number of limitations, for example, Schoorman et al. (2007) note that one of the limitations of their integrative model is that their conceptualisation of trust was unidirectional and does not account for reciprocity in trusting relationships. However, these same authors argue that trustor can trust the trustee, but the trustee may not trust the trustor. Other limitations and criticism of this model are listed further ahead in this section.

Figure 1.1: The integrative model of organisational trust (Mayer et al., 1995)

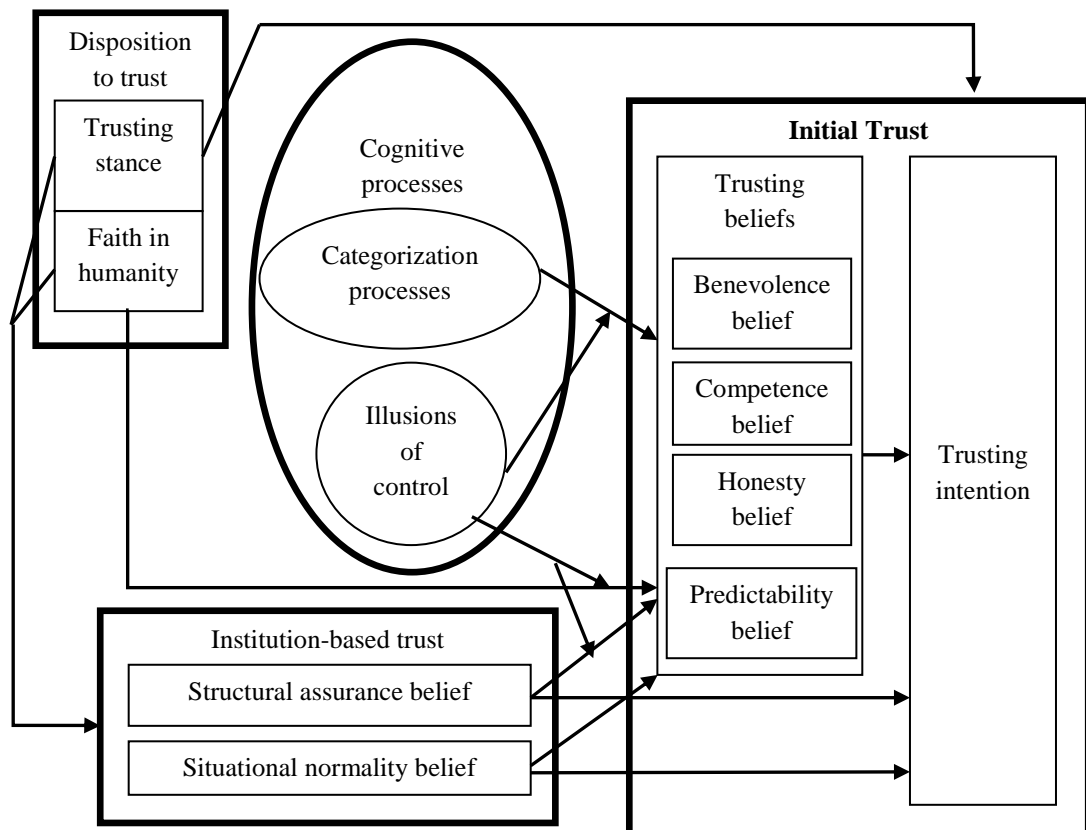


Sheppard and Sherman (1998) also conceptualized trust as accepting the risks associated with the type and depth of the relationship the trustor and trustee are engaged in, which is similar to Mayer et al.'s (1995) conceptualization of trust as the willingness to take risks but not taking risk per se. Sheppard and Sherman (1998) identified four different types of relationships (shallow dependence, deep dependence, shallow interdependence, deep interdependence) and different types of risks associated with each type of relationship.

While Mayer et al. (1995) separated between trust, trustworthiness and trusting actions by considering positive expectations (i.e. trustworthiness) and trusting behaviours to be outside the scope of the 'trust' label (i.e. willingness to be vulnerable), some other models (e.g. Dietz and Den Hartog, 2006; McKnight et al., 1998) have widened the scope of the 'trust' label to include two or all three of those constructs (dimensions) while still differentiating between those constructs. Furthermore, Webber (2008) notes that various researchers have proposed that trust is multidimensional. For example, McKnight et al.'s (1998) model (figure 1.2) defined trust to mean "that one believes in, and is willing to depend on, another party" (McKnight et al., 1998, p.474), and included two components that make up trust, the first, trusting beliefs which according to these authors reflect beliefs focusing on the trustworthiness components suggested by Mayer et al. (1995), namely; benevolence, competence, honesty and predictability. The second component, trusting intension, means "that one is willing to depend on the other person in a given situation" (McKnight et al., 1998, p.474). Similar to the Mayer et al. (1995) model, this model does not include 'trusting behaviour' as part of the conceptualisation of trust. However, it differs from the Mayer et al.'s (1995) model in terms of including under the 'trust' label both the trustworthiness beliefs and the willingness to be vulnerable elements.

This exclusion of trusting behaviour or risk taking behaviour from the operationalization of trust (i.e. the 'trust' label) in these two models can be criticized since Li (2012, p.101) notes that "while the majority of trust researchers adopt the definition of trust as a psychological willingness to accept vulnerability (i.e. trust-as-attitude), a growing number of trust researchers argue for the definition of trust as a behavioural decision to accept (and even appreciate) vulnerability (i.e. trust-as-choice)". Li (2007) argues that while trust-as-attitude is a psychological state of passively accepting risk rather than initiating to take risk, trust-as-choice is proactive in accepting risk and results in a pattern of cooperative behaviours that the trustor initiates to prove or demonstrate his/her trustworthiness to a trustee in a reciprocal trust building process. Li (2012) further argues that trust-as-attitude is not sufficient to understand trust. Dietz and Den Hartog (2006) note that the inclusion of trusting action into a model of trust is contended in the literature and brought about partly by the fact that trust the belief, decision and action are being regularly conflated in everyday connotations and uses.

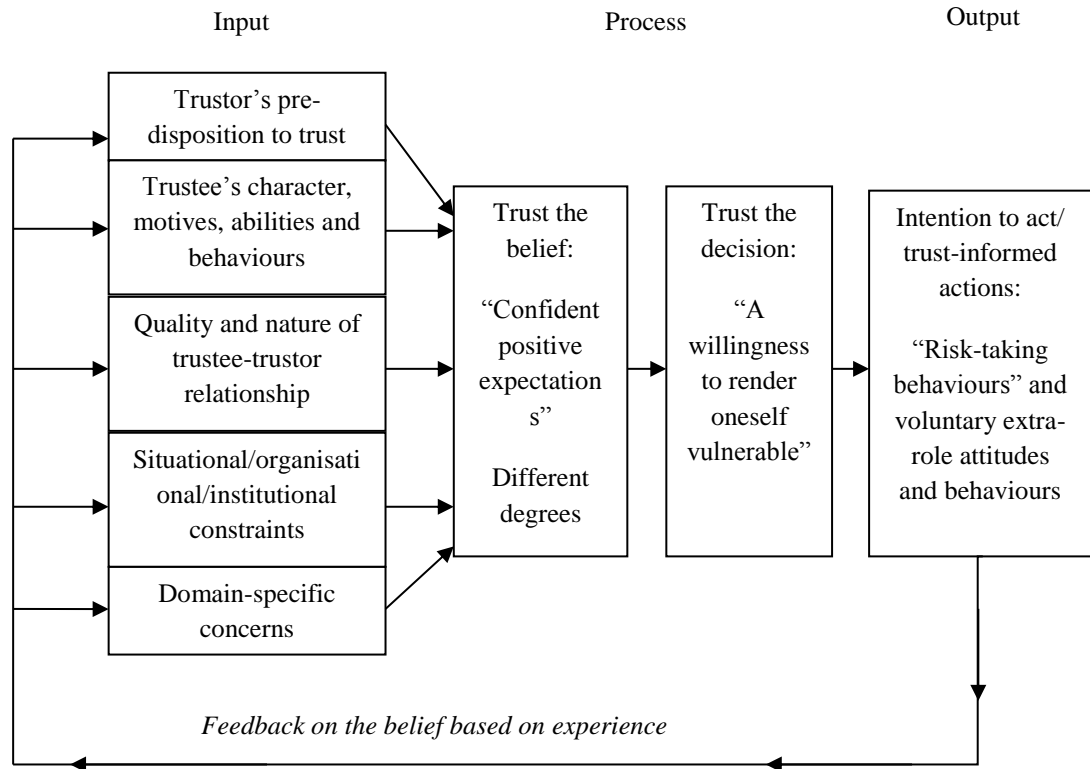
Figure 1.2: Model of initial formation of trust ( McKnight et al., 1998)



In their conceptualisation of trust, Dietz and Den Hartog’s (2006) included trusting behaviours and noted that their conceptualisation of trust includes and distinguishes between three constituent parts of trust: the expectation part, the willingness to be vulnerable part and the risk taking act part. Thus, in their model, Dietz and Den Hartog’s (2006) framework (figure 1.3) conceptualized trust as composed of three different forms by drawing on elements from the most quoted trust definitions: trust the belief, trust the decision and trust the action. The first form of trust proposed by Dietz and Den Hartog (2006), trust the belief, is “a subjective, aggregated, and confident set of beliefs about the other party and one’s relationship with her/him, which lead one to assume that the other party’s likely actions will have positive consequences for oneself” (Dietz and Den Hartog, 2006, p.558), or in other words “an assessment of the other party’s trustworthiness” (Dietz and Den Hartog, 2006, p.559).

The second component of trust in the Dietz and Den Hartog (2006) framework is trust the decision which is defined as “the decision to actually trust the other party. This is the stage at which the belief in the others’ trustworthiness is manifested – partially – in trust itself” (Dietz and Den Hartog, 2006, p.559).

Figure 1.3: Depiction of the trust process ( Dietz and Den Hartog, 2006)



Dietz and Den Hartog (2006, p. 559) further note that “this decision implies only an intention to act”. This is the same as how Mayer et al. (1995) described trust as the willingness to be vulnerable or take risks but not taking risks per se and according to McEvily et al. (2003) the willingness to be vulnerable reflects volition or intentionality. As for the third component, trust the action, it is to “follow through on this decision by engaging in any of the trust-informed risk-taking behaviours” (Dietz and Den Hartog, 2006, p.559).

However, as will be evident next, these models did not include the affective component/process of the multidimensional conceptualisation of trust that some other models (also categorised under Lewicki et al.’s (2006) psychological tradition) emphasised. For example, the model proposed by McAllister (1995) (figure 1.4), defined trust “as the extent to which a person is confident in, and willing to act on the basis of, the words, actions, and decisions of another” (McAllister, 1995, p.25), and viewed it as being composed of and based on two dimensions. The first dimension, cognitive based trust is - as argued by McAllister (1995) - founded on available knowledge about the trustees’ competence, responsibility, reliability and dependability.

As for the second dimension, affective based trust, McAllister (1995) argues that it is trust that is founded on the emotional ties and bonds between the two parties in the relationships and on genuine care and concern for the welfare of the other party, and finally, the belief that these sentiments are reciprocated.

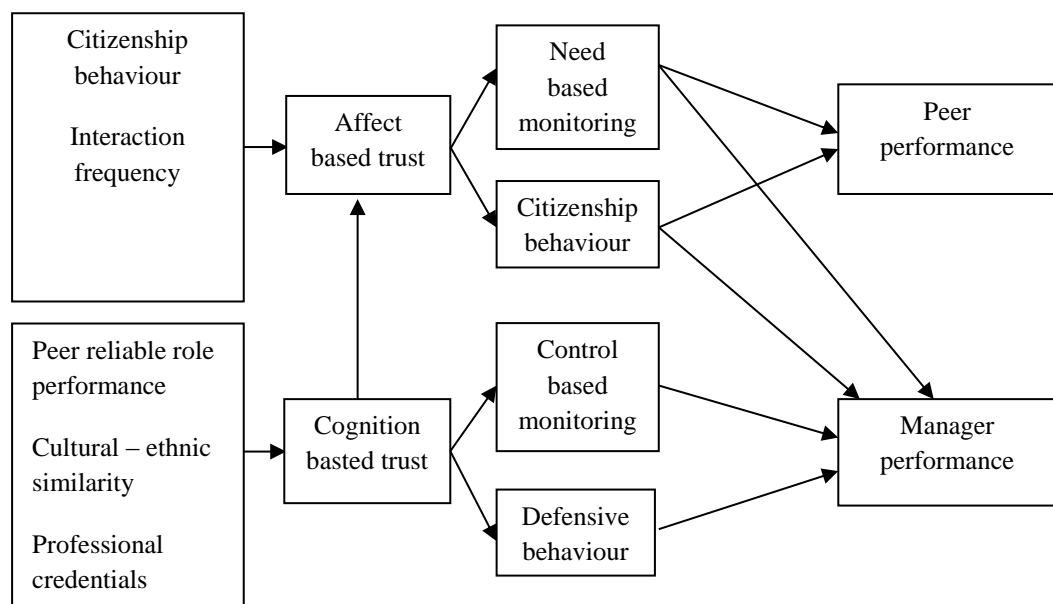
According to McEvily and Tortoriello (2011) McAllister's definition incorporates both the positive expectation elements and willingness to be vulnerable elements of trust. However, McAllister (1995) used two scales (one for cognitive-based trust and one for affective based trust) to measure trust and in both scales the distinction between the two elements of the definition was not made. Thus, one limitation of McAllister's (1995) model is that it does not appear to account for trust as 'willingness to be vulnerable' since this element of trust only appears in their definition of trust and is not clearly reflected in their model or developed measure. McEvily and Tortoriello (2011) note that the observation of a single factor in studies that replicated McAllister's trust measure raises a question on the extent to which this measure reflects the willingness to be vulnerable element or the positive expectation element of the trust definition. Anyone reading through the scale's items for cognition-based trust and affect-based trust (see McAllister, 1995, p.37) can notice that these items mostly reflect evaluations of the trustee's characteristics (e.g. professionalism, dedication, competence, trustworthiness as seen by others, levels of trust and respect by others, how others view the trustee's performance) in addition to the trustee's caring intentions toward the trustor and the nature of the relationship between the two. Only few items in McAllister's (1995) measure reflect reliance on or disclosure to the trustee, however, the wording of these items (e.g. "I can rely on this person not to" ..., and "I can talk freely to this individual about" ...) possibly reflect more an assessment of the extent to which the trustee can be relied on or talked freely to rather than directly reflecting the extent to which the trustor is 'willing' to rely on or disclose information to the trustee.

This observation is supported by Ferrin et al. (2008) who note that McAllister (1995) operationalised trust as positive confident expectations, while Mayer et al. (1995) operationalised trust as willingness to accept vulnerability. Furthermore, McAllister (1995, p.51) note that the findings of his study "indicate that the beliefs of managers about the trustworthiness of peers can be measured along two dimensions, the extent of affect-based trust and the extent of cognition-based trust". Thus, indicating that these two trust dimensions are concerned with evaluating the trustee's trustworthiness rather

than willingness to accept vulnerability. Thus, one limitation of McAllister's (1995) model is that it does not appear to account for trust as 'willingness to be vulnerable' since this element of trust only appears in their definition of trust and is not clearly reflected in their model or developed measure. Furthermore, another limitation of this model is that similar to the Mayer et al.'s model, this model does not include trusting behaviours under the 'trust' label.

Similarly, adopting the view that trust is positive expectations, Payne and Clark (2003) used both situational factors and dispositional factors to predict the trustworthiness of managers which was treated as an attitude where cognitive, affective and intentional features of the manager's trustworthy behaviours are assessed. Thus, in this model it appears that the label cited in their study 'trust in manager' was mostly conceptualised as trustworthiness (of the manager) which in turn was conceptualised as an attitude involving cognitive, affective and intentional subcomponents. According to Payne and Clark (2003) the cognitive, affective and intention sub-components measured respectively the respondents' ratings (i.e. strongly agree to strongly disagree) of 1) beliefs about their manager's availability, confidence, reliability, etc; 2) how they feel about their manager's availability, trustworthiness, competence, etc; and 3) if they intend to act as if their manager's is available, trustworthy, displays loyalty, etc. however, unlike McAllister's (1995) this model

Figure 1.4: Theoretical model outlining the role of trust in interpersonal relationships in organisations (McAllister, 1995)



As indicated earlier, the affective component of trust described by McAllister (1995) was not included in the model of Mayer et al. (1995) and the multidimensional models of Dietz and Den Hartog (2006); McKnight et al. (1998). This supports Lewicki et al.'s (2006) comment about researchers' historical tendency to overlook the emotional or affective subcomponent of trust. However, a considerable number of empirical studies (e.g. Chhetri, 2014; Swift and Hwang, 2013; Dunn et al., 2011; Webber, 2008; Chua, Ingram and Morris, 2008; Johnson and Grayson, 2005; Morrow Jr and Hansen, 2004; Erdem and Ozen, 2003; Kanawattanachai and Yoo, 2002) have adopted the cognitive and affective dimensions of trust proposed by researchers such as McAllister (1995). Moreover, empirical evidence found that the two dimensions are separate and related. For example, McAllister (1995) found strong support for the distinction between cognition based and affect based trust and that cognition based trust positively predicts affect based trust. Webber (2008) found that affective and cognitive trust are significantly related and emerged as separate constructs over time.

Even though these studies adopting the McAllister (1995) conceptualisation of trust (i.e. positive expectations) can be criticised for not including the willingness to accept vulnerability and trusting behaviours elements in their conceptualisations of the 'trust' label, nonetheless, the empirical evidence from McAllister (1995) and Webber (2008) suggesting that positive expectations have both cognitive and affective dimensions provides support to the criticism of Mayer et al.'s model for not including an affective dimension alongside evaluations of the trustee's trustworthiness as antecedents of the willingness to accept vulnerability construct.

Schoorman et al. (2007) reflected on their integrative model of organisational trust and noted that it represents a cognitive approach to trust and that the role of emotion or affect would be a very interesting area of research and will add a new dimension to their model. Thus, implying that the cognitive evaluations (perceived ability, benevolence and integrity of the trust) they proposed may not be enough for explaining trust and that they can be supplemented by adding the affective evaluations (such as those proposed by McAllister, 1995). This is one of the thesis limitations and is further noted in the limitation section within the final chapter. However, Schoorman et al. (2007, p.349) also note that "proponents of the strictly cognitive approach to decision making about trust would argue that while emotions may create a temporary 'irrationality' about the

data on ability, benevolence, and integrity, after a period of time the perception would return to a rational perspective”.

According to Dietz et al.(2010) this debate on what the concept of trust is has been long-standing but moribund. However, the previous examples noted in the overview of trust models show that even though these models differed in terms of the nature and number of components they included under the ‘trust’ label, they all agree on the relationships or sequence of interactions between these components whether these components are part of the ‘trust’ label or outside the scope of the ‘trust’ label. This observation largely applies to the models developed by Dietz and Den Hartog (2006), McKnight et al. (1998) and Mayer et al. (1995). For example, the positive expectation element of trust is found in the three models. Dietz and Den Hartog (2006) referred to it as ‘trust the belief’, McKnight et al. (1998) referred to it as ‘trusting beliefs’ and Mayer et al. (1995) referred to it as ‘factors of perceived trustworthiness’.

As for the ‘the willingness to accept vulnerability’ element, Dietz and Den Hartog (2006) referred to it as ‘trust the decision’, McKnight et al. (1998) referred to it as ‘trusting intention’ and Mayer et al. (1995) referred to it as ‘trust’. Finally, in relation to the ‘trusting behaviours’ element, Dietz and Den Hartog (2006) referred to it as ‘trust the action or trust-informed risks’, and Mayer et al. (1995) referred to it as ‘risk taking in relationship’.

Another observation is that all three models distinguish between these elements. This is important because according to Ferrin et al. (2008, p. 174) “trust is indeed a family of related constructs. However, even in a family each member needs to have a different name so that we don’t mistake one family member for another”. Furthermore, all three models depict similar relationships between these elements. For example, as shown in figures 1.1, 1.2 and 1.3, the positive expectation element leads to the willingness to be vulnerable element and as shown in figures 1.1 and 1.3, the willingness to be vulnerable element leads to the trusting behaviours element.

Thus, this thesis adopts these elements of trust (i.e. positive expectations, willingness to be vulnerable and trusting actions) that are depicted these two models (i.e. Mayer et al.’s, 1995; Dietz and Den Hartog’s, 2006) and partially depicted in McKnight et al.’s (1998) model when examining trust within co-worker relationships. This is because (in addition to the previous observations about these three models) this thesis does not



make any contribution to resolving the longstanding debate on which of these three elements should be included under the trust label and moves beyond it in order to focus on examining trust within different co-worker relationship dyads.

Furthermore, these observations make it clear that even though the Mayer et al. (1995) model was developed more than 15 years ago and has its limitations and (as noted earlier) has been criticized for not including emotions in the model or not including trusting behaviours in the conceptualisation of trust, the variables depicted in this model are widely acknowledged by trust researchers. For example, Dietz et al. (2010, p.10) described this model as influential. Similarly, Wasti et al. (2007) note that the model has become widely accepted and used in organisational research. Consequently, Ferrin et al. (2008, p. 174) note that “Due to the prominence of the Mayer et al. (1995) model, we propose that future articles adopt the Mayer et al. terminology. In rare cases where that cannot be done, at a minimum articles should explicitly clarify how their terminology relates to the Mayer et al. (1995) terminology.”. Thus, this thesis adopts the terminology proposed by Mayer et al.’s (1995) model.

#### **1.2.1.2.2 Levels of Analyses and Range of Antecedents**

This thesis examines the antecedents and outcomes of trust in two different trust foci. Specifically, each participant is asked to provide responses to a number of variables (trust, its antecedent and outcomes) in relation to one permanent co-worker and one contingent co-worker. Given that a number of the theoretical models overviewed earlier were developed as context specific models, some of the antecedents of trust they proposed may not be relevant to the co-worker contexts examined in this thesis. Furthermore, the number and wide range of antecedents they proposed may cause any examination of trust in these six co-worker contexts to be unpractical and unfeasible, especially since this is a PhD project constrained by time and resource limitations. Thus, it was important to choose a model that is parsimonious (to make examination of trust, its antecedents and outcomes within different forms of co-worker contexts feasible) in addition to being theoretically applicable across levels of analysis and confirmed empirically as robust and applicable to different levels of analysis.

The review of theoretical models (e.g. Dietz and Den Hartog, 2006; McKnight et al. 1998; Mayer et al., 1995; McAllister, 1995) developed to examine trust shows that they differ from one another in terms of the relationship context (i.e. level of analysis) in

which they depict trust, its antecedents and outcomes. For example, the McKnight et al. (1998) model examines the antecedents of initial trust (interpersonal trust within the context of work relationships between two parties that meet for the first time). Thus, this model is specifically designed for those types of relationships and it is possible that some of the antecedents proposed by this model (see figure 1.2) may not apply or be relevant to the co-worker relationships examined in this thesis since most of which are assumed to be in later stages of the relationship lifecycle rather than initial relationships. Furthermore, the large number of antecedents in this model makes it impractical to examine trust within the different co-worker dyads emphasized in this thesis. These limitations also apply –more or less- to other models developed to examine trust in a specific relationship context and described next.

Some models were also specific in terms of the referent of trust or level of analysis to which their models are concerned with, such as those of Payne and Clark (2003) and Whitener et al. (1998) which examined trust and its antecedents in work relationships between managers and subordinates. According to Schoorman et al. (2007) in the context of trust between peers, there is likely to be a different set of antecedents predicting the development of trust than those predicting trust in relationship contexts between a supervisor and a subordinate where there are power differences and asymmetry of information. Similarly, McAllister (1995) investigated trust in work relationships between managerial peers, yet not subordinate peers.

Other models (e.g. Dietz and Den Hartog, 2006; Mayer et al., 1995) are more general in that they do not specify or limit their model to a particular referent of trust (e.g. manager, co-worker, subordinate). Consequently, it is assumed that they are applicable for examining the antecedents of trust in work relationships between a trustor and a trustee regardless of who the referent of trust is. As figure 1.3 shows, the model developed by Dietz and Den Hartog (2006) includes a wide range of antecedents to the construct ‘trust the belief’. Even though, as indicated earlier, the elements or forms of trust depicted in this model are adopted in this thesis, the inclusion of all the variables that predict the first form of trust in a questionnaire that asks participants to provide responses about a permanent co-worker and again about a contingent co-worker would make the questionnaire very long and not practical.

As for the Mayer et al. (1995) model, it's appropriateness for examining trust in the previously un-researched relationship contexts involving permanent and contingent co-workers can be argued from Mayer et al.'s description of the model as being "focused on trust in an organizational relationship" (Mayer et al., 1995, p.730). Also, according to Schoorman et al. (2007), their intention in developing the Mayer et al. (1995) model was to produce a parsimonious model (i.e. a multilevel model) that would be generalizable to the broadest number of contexts (e.g. the context of supervisor and subordinate relationship, co-workers relationship, etc) and they further note that they were careful to develop constructs that would be applicable across levels of analyses. Schoorman et al. (2007, p.345) support this by noting that they "have heard from a number of scholars that the 1995 framework is fairly robust across levels of analysis". Empirical evidence also provides strong support to the applicability of this model across levels of analyses and even across different cultures. For example, findings from meta-analysis (e.g. Colquitt et al., 2007) and empirical research (e.g. Knoll and Gill, 2011) largely confirm the applicability of this model across different organisational relationship contexts. Moreover, some of Ferrin and Gillespie's (2010) conclusions which were based on a review of empirical findings reported in the cross-culture trust literature support the view that the antecedents depicted in this model are applicable across different cultures. However, even though the earlier arguments support the suitability of the model for examining trust across levels of analyses and across different cultures, the robustness of this model across levels of analyses can also be a potential limitation because according to Schoorman et al. (2007) in order to develop a generalizable model, they neglected many context-specific variables that would be relevant to examining trust within particular relational context. Thus, when examining trust in a specific relationship context using this model, it is possible that a number of context-specific variables that contribute to trust development are being overlooked. Consequently the insights about the antecedents of trust within the specific relationship context may be limited. This is another limitation of this model and it will be discussed later as one of the thesis limitations.

It was illustrated earlier that the constructs and relationships depicted and theorised in Mayer et al.'s model are also evident in parts of other models (i.e. Dietz and Den Hartog, 2006; McKnight et al., 1998). Thus, this thesis adopts the constructs and the proposed relationships among these constructs that first appeared in Mayer et al.'s

model and later adopted and depicted in parts of other models such as Dietz and Den Hartog's (2006) trust framework.

#### **1.2.1.2.3 Critique of Available Measures**

In relation to the scales used to measure the adopted conceptualisations of trust in the trust literature, Ferrin et al. (2008, p.174) notes that "some studies measure trust using the McAllister (1995) operationalization of trust as positive confident expectations, whereas other studies measure trust using the Mayer and Davis (1999) operationalization of trust as willingness to accept vulnerability."

As was argued and illustrated earlier, the Mayer et al. (1995) model is widely acknowledged and drawn upon by a substantial number of researchers when developing their respective trust models (either for empirical studies or theoretical papers) while the operationalization of trust proposed by McAllister (1995) was adopted in a considerable number of empirical studies. Thus indicating that measures developed to tap into the operationalization's of trust depicted by these two models are considerably used within trust literature.

There are a number of criticisms to the scales developed to measure either McAllister's (1995) 'positive expectations' operationalization of trust or Mayer et al.'s 'willingness to accept vulnerability' operationalization of trust. In relation to the former measure developed by McAllister (1995), other than the criticism noted earlier about the extent to which this measure reflects the 'willingness' or 'positive expectations' elements of McAllister's (1995) definition of trust, McEvily and Tortoriello (2011) also note that the wording of some items in this measure (e.g. "We have a sharing relationship" and "Most people ... trust and respect him/her") raises questions about the respondent's ability to provide accurate assessments on behalf of the trustee or on behalf of others view of the trustee.

In relation to the latter measure, according to McEvily and Tortoriello (2011) the Mayer and Davis (1999) measure was designed to operationalise the model developed by Mayer et al. (1995). That is, as apparent in Mayer and Davis (1999) study, a number of scales were developed to measure trust, trustworthiness factors, propensity to trust and risk-taking in relationship which are all constructs in the model. McEvily and

Tortoriello (2011) further note that the greatest strength of these scales is that they are directly linked to the Mayer et al. (1995) model.

In relation to the scale measuring trust, Schoorman et al. (2007) note that they are aware that many researchers are concerned with the lower than desirable alpha levels of the four-item scale developed to measure trust as ‘willingness to be vulnerable’. However, a number of scholars (e.g. McEvily and Tortoriello, 2011; Schoorman et al., 2007) pointed to other scales (i.e. Gillespie, 2003) developed to measure trust as ‘willingness to be vulnerable’. Schoorman et al. (2007) notes that Gillespie’s (2003) ten item measure shows promise for future research while having good psychometric properties. As for McEvily and Tortoriello (2011) they note that Gillespie’s (2003) measure was designed to be applicable across various domains of organisational activity and the measure focuses explicitly on measuring the ‘willingness to be vulnerable’ element. Thus, this review of available measures provides stronger support to the adoption of the Mayer et al. (1995) model and the adoption of measures designed to tap into its constructs.

The next section will provide an overview the cross-cultural trust literature. The overview will further highlight the relevant gap presented in the introduction of this chapter and will present empirical findings from this literature to support hypotheses development.

### **1.2.2 Cross-Cultural Trust**

This thesis focuses on exploring the meaning of trust, its antecedents and outcomes within the Jordanian cultural context. Thus, after providing an overview of early theoretical contributions to explain the impact of different cultural dimensions on interpersonal trust development, a review is provided on the findings of empirical research focusing on the meaning, antecedents and outcomes of trust across different cultures.

#### **1.2.2.1 Early Theoretical Contributions Linking Culture to Trust**

One of the theoretical contributions in relation to the impact of culture on trust is that made by Doney, Cannon and Mullen (1998). Doney et al. (1998) examined the extent to which Hofstede’s (see Hofstede, 1983) four dimensions of national culture facilitate or inhibit the use of different cognitive processes of interpersonal trust development.

Hofstede (1983) provided a useful taxonomy to describe and identify the norms and values of national cultures by proposing four different cultural dimensions: 1) individualism versus collectivism; 2) large or small power distance; 3) strong or weak uncertainty avoidance; and 4) masculinity versus femininity.

In their paper, Doney et al. (1998) outlined and described five cognitive trust-building processes as follow: 1) a calculative process (whereby trust is established based on the assessment that the costs of opportunistic behaviour exhibited by the trustee exceed the benefits of such behaviour), 2) a prediction process (whereby trust is established when the trustor -based on past experiences with the trustee- judges the behaviour of the trustee to be consistent and predictable and is confident that this judgment is accurate), 3) an intentionality process (whereby trust is established when the trustor has decided the trustee's intentions in an exchange are benevolent), 4) a capability process (whereby trust is established when the trustor has determined the trustee is capable of meeting his/her own obligations and the trustor's expectations), and 5) a transference process (whereby trust is established when the trustor establishes a link between someone the trustor knows and trusts and someone unknown by the trustor, and this allows the transference of trust from the known trustee to the unknown trustee).

Doney et al. (1998) then provided a number of research propositions that illustrates which cognitive trust building processes is most likely to be used by trustors (to establish trust) within the domain of each of the four cultural dimensions. In general, they posited that calculative and capability processes are more likely to be used by individuals in cultures characterised by one or more of the following cultural dimensions: individualism, masculinity and high power distance. However, in relation to the impact of the 'uncertainty avoidance' cultural dimension on the likelihood of using the calculative and capability processes to form trust, they theorised that individuals in cultures scoring low on uncertainty avoidance, are more likely to use a calculative process, while individuals in cultures with high uncertainty avoidance, are more likely to form trust via a capability process.

As for the prediction, intentionality and transference processes, Doney et al. (1998) theorised that these processes are more likely to be used by individuals in cultures characterised by one or more of the following dimensions: collectivism, femininity and high uncertainty avoidance. In addition to these propositions, they proposed that in low

power distance cultures, trust is more likely to be established via Intentionality and transference processes, while in high power distance cultures trust is more likely to be formed via a prediction process.

As indicated earlier in the introduction of this chapter, Jordan has a collectivist culture (Alkailani et al., 2012). Thus, Doney et al.'s (1995) propositions about the impact of individualist vs collectivist cultures on trust building processes is discussed in more detail.

Hofstede (1991, p.51) notes that "Individualism pertains to societies in which the ties between individuals are loose: everyone is expected to look after himself or herself and his or her immediate family. Collectivism as its opposite pertains to societies in which people from birth onwards are integrated into strong, cohesive ingroups, which throughout people's lifetime continue to protect them in exchange for unquestioning loyalty". Collectivism is also defined as "giving priority to the goals of one's groups (often one's extended family or work group) and defining one's identity accordingly." (Myers, 2005, p.46).

In relation to the calculative process, Doney et al. (1998) proposed that trustors in individualistic cultures are more likely to use a calculative process to form trust than trustors in collectivist cultures. They argue that opportunistic behaviours and self-serving behaviours do not fit the 'we' consciousness prevailing in collectivist societies. However, these authors argue that opportunistic and self-serving behaviours are high and more frequent in individualistic societies since the value placed on personal accomplishment in these societies indicate that little cost is associated with the occurrence of self-serving behaviours.

In relation to the prediction process, Doney et al. (1998) proposed that trustors in collectivist cultures are more likely to use a prediction process to form trust than trustors in individualist cultures. They argue that in individualistic societies, norms support distinctiveness and idiosyncrasy and do not restrict variance in human behaviour while norms in collectivist cultures support behavioural conformity and serve to curb variance in human behaviour.

As for the intentionality process, Doney et al. (1998) argued that relative to individuals in individualist cultures, individuals in collectivist cultures are more likely to form trust

based on perceptions of the benevolent motives of the trustee (i.e. intentionality process), since norms in collectivist cultures provide strong evidence for the trustor that the trustee's intentions are benevolent while in individualistic cultures, there is weak evidence that the trustee will act in the trustor's best interest. Furthermore, they argue that the predominance of group rewards and the importance of joint efforts in collectivist cultures indicate that the trustee will act in the trustor best interests. This proposition was supported by Wasti et al. (2011) who described Turkey as having a collectivist national culture with high power distance and found that for the Turkish sample, benevolence was the most salient predictor of trust in a peer. Wasti et al. (2011, p.295) further concluded that when "highlighting the relevance of collectivist norms, benevolence emerges as the most significant factor in trust development".

Doney et al. (1998) also argued that relative to individuals in collectivist cultures, those in individualist cultures are more likely to form trust based on perceptions of the capability of the trustee. Doney et al. (1998, p.611) further explain that "evidence of a target's capability may not be particularly valuable in collectivist cultures, where group cooperation is the norm and where people work together to accomplish group goals". Doney et al. (1998, p.612) also argue that norms and values in individualist societies "suggest that evidence of a target's capability is a reasonable basis upon which to form trust". . These latter arguments suggest that individuals in collectivist cultures may consider the ability of the trustee to be less important than other trustworthiness factors (e.g. benevolence) when forming their trust in a trustee.

Finally, Doney et al. (1998) propose that relative to trustors in individualist cultures, trustors in collectivist cultures are more likely to use a transference process to form trust. They argue that in individualist societies it is difficult for trust to transfer from one person to another while in collectivist societies transfer of trust is easy since within the in-group, members are usually highly trusted, thus, proof sources are easy to identify. Furthermore, Doney et al. (1998, p.612) argue that "strong interpersonal ties and the we consciousness characteristic of a collectivist society suggest that trustors will judge others to be similar".

A theoretical contribution was also provided by Chen, Chen and Meindl (1998) who proposed that the cultural dimension 'collectivism versus individualism' has an influence on the strength of the positive relationship between each base of trust



(cognitive-based trust, affect-based trust) and cooperation by positing that the relationship between cognition-based trust and cooperation is stronger in individualist cultures than in collectivist cultures whereas the relationship between affect-based trust and cooperation is stronger in collectivist cultures than in individualist cultures.

Ferrin and Gillespie (2010) noted some of the limitations of these theoretical frameworks by arguing that these frameworks might have missed many important elements of trust across cultures since their propositions were deduced logically rather than being induced from empirical evidence of trust within different cultures. Similarly, Noorderhaven (1999) notes that many of the arguments presented in Doney et al. (1998) paper to support their proposition appear to be shaky when inspected closely. Furthermore, Noorderhaven (1999) note that the Doney et al. (1998) paper assumes that the four cultural dimensions will influence the five trust building processes while ‘*ceteris paribus*’ (e.g. the assumption that the definition or meaning of trust as a psychological state is universal). In sum, these criticisms highlight the need for conducting empirical research to examine the impact of culture on interpersonal trust.

#### **1.2.2.2 Empirical Research Findings**

This section provides an overview of the empirical findings in relation to the meaning of trust, its antecedents and outcomes within and across different cultures (for a more comprehensive review see Ferrin and Gillespie, 2010).

##### **1.2.2.2.1 The Meaning of Trust and Trustworthiness across Cultures**

Part of the cross cultural trust literature has focused on exploring the meaning of trust or trustworthiness and how they are perceived by members of different cultures. For example, Nishishiba and Ritchie (2000) explored potential differences between Japanese and U.S employees in terms of their conceptualisation of trustworthiness and found that there are some similarities and differences in the way Japanese and U.S employees understand trustworthiness. These authors concluded that when judging another’s trustworthiness “Japanese business people emphasize the relationship of the individual to the group and the organization, and U.S. business people focus on individual personal qualities and behaviors that hold true regardless of the group or organization to which one belongs.” (p. 361). For example, they found that when judging another’s trustworthiness, U.S employees emphasize personal integrity which

was not considered a key aspect of trustworthiness by Japanese employees who rather emphasized organisational commitment to judge the trustworthiness of another.

In a single country study, Tan and Chee (2005) adopted a qualitative methodology and found that there are some 'emic' differences in the meaning of trust as perceived by individuals in a Confucian influenced society. They concluded that the psychological state of trust cannot be generalized across different cultural settings since as opposed to McAllister's (1995) finding that cognitive-based trust is a precursor to the development of affective-based trust, they found that in the Confucian influenced setting, the affective factors of trustworthiness are more salient to the development of trust than the cognitive factors of trustworthiness. Bürger, Luke and Indeláová (2006) examined whether cultural differences exist when evaluating the trustworthiness of another and found similarities between German and Czech employees in terms of the central components of trustworthiness (i.e. reliability, openness, loyalty and commitment/helpfulness were all considered important characteristics of a trustworthy person by both German and Czech employees), furthermore, they found that competence was considered when judging the trustworthiness of another by Czech employees but not by German employees which they explain by noting that for German employees competence is assumed to be a pre-requisite for an employee to possess the job but not for Czech employees due to their previous experiences with co-workers who were not qualified yet had good connections. However, these authors also found some differences in the behavioural signs that German and Czech employees associated with the trustworthiness components.

Even though some of these studies found both similarities and differences in how members of different cultures view trust/trustworthiness, other studies provided evidence of only similarities in how trust/trustworthiness is perceived across different cultures. For example, in another single country study, Ding and Ng (2007) tested the reliability and validity of a Chinese translated version of McAllister's (1995) two dimensional trust measure (i.e. cognitive-based and affect-based trust) in China and found that the measure had high reliability (except for one item) and that the two dimensional structure of McAllister's trust measure was supported within the Chinese sample. Chathoth, Mak, Sim, Jauhari and Manaktola (2011) defined organisational trust as the employee perception of three trust dimensions; integrity, commitment and

dependability and found that the three dimensions represent the trust construct across different national cultures (i.e. United States and India).

In relation to the meaning of trust and trustworthiness across cultures, Ferrin and Gillespie (2010) concluded (based on their review) that there is evidence that some dimensions of these two constructs are universal while there is also evidence that some aspects of these constructs are unique to certain cultures.

One limitation of these studies is that they limited their conceptualisations of trust as positive expectations only, thus examining whether trustworthiness is perceived differently across cultures. These studies did not explore whether there are differences in the meaning of trust as a willingness to be vulnerable across cultures. Thus, the insights they provide are limited to trust as a positive expectation rather than also providing insight on whether the willingness to be vulnerable element of trust is part of how individuals across different cultures define or perceive trust.

#### **1.2.2.2.2 The Antecedents of Trust across Cultures**

Similarly, a considerable part of the cross cultural trust literature has focused on identifying the antecedents of trust across different cultures. Given that the focus of this thesis is on examining the antecedent of trust as depicted in the Mayer et al. (1995) model (i.e. trustworthiness factors of ability, benevolence and integrity) within co-worker contexts in Jordan, the highlight in this section is on reviewing empirical findings relating to the applicability of these trustworthiness factors within and across cultures. However a brief overview of findings relating to other trust antecedents across cultures is first provided.

A number of trust antecedents have been identified in cross cultural studies on trust. Some of these identified antecedent were at the country level, For example, using data from the World Values Surveys which contains data on respondents from 29 market economies, Knack and Keefer (1997) found that trust is stronger in nations that have higher and more equal incomes, have institutions that restrain their chief executives' predatory actions and have better-educated populations and have more ethnically homogenous populations.

Similarly, using data from the World Values Survey and data from the Danish Social Capital Project, Bjørnskov (2006) explored the determinants of generalised trust across

countries and found that income inequality and ethnic diversity as well as religious differences reduce trust, in addition, they found that societies in monarchies are more trusting while post-communist societies are less trusting.

However, in a comparative study across 20 European countries, Hooghe, Reeskens, Stolle and Trappers (2009) used data from the European Social Survey and data migration patterns from Organization for Economic Co-operation and Development to mainly examine the relationship between ethnic diversity and trust. They found that gender, age, education, financial satisfaction, employment status, religious involvement (i.e. attending church) and political efficacy affect generalised trust levels. Furthermore, on the country level, they found that the gross domestic product is positively and strongly related to generalised trust and that income inequality affects generalised trust while ethnic diversity was not strongly and consistently related to generalised trust, thus indicating that the negative impact of ethnic diversity on generalised trust does not hold across European countries.

One limitation of these studies is their limited conceptualisation of trust as only generalized trust in others (which is conceptually similar to propensity to trust others as depicted in Mayer et al.'s model). Thus, these studies do not provide specific insight on trust in certain individuals within organisations since they don't compare the levels of trust as a willingness to be vulnerable to specific organisational foci across different cultures.

Other antecedents were also identified in this literature. For example, Cook, Yamagishi, Cheshire, Cooper, Matsuda and Mashima (2005) conducted laboratory experiments in Japan and the U.S to examine the cross-cultural and independent effects of risk taking on trust development and concluded based on their findings that risk taking (or the availability of opportunities to take risks) is important for Americans when developing trust while it is less important for the Japanese.

Some studies found that some trust antecedents are more important or more emphasised in certain cultures. For example, Kim (2005) found that in individualist cultures, cognition based trust determinants are more positively associated with trust in e-vendors than affect-based trust determinants while in collectivist cultures, affect-based determinants are more positively associated to trust in e-vendors than cognitive-based determinants. Similarly, Tan and Chee (2005, previously reported) found that affective

determinants of trust are more important than cognitive determinants of trust in Confucian culture. This finding differs from that suggested by the western trust literature (i.e. McAllister, 1995).

Furthermore, Kim (2008) examined the impact of two types of cultures (i.e. type I: individualistic-weak uncertainty avoidance- low long-term orientation-low context; and type II: collectivist-strong uncertainty avoidance-high long-term orientation- high context) on the determinants of trust in e-vendors and found that perceived importance of third-party seal and perceived importance of positive referral (i.e. transference based trust determinants) are more positively associated with consumer trust in e-vendors in a type II culture than in a type I culture.

In a cross-cultural study (i.e. Canada, Mexico and the United States), Elahee, Kirby and Nasif (2002) examined the impact of national culture on the level of trust a person is willing to place in an opponent negotiator in intra- and cross-cultural business negotiations and the consequent impact of this trust on preference to use questionable negotiation tactics. They note that Mexico has a collectivist culture while Canada and U.S have individualist cultures. They found that in all three samples, the level of trust in the opponent negotiator was negatively associated with preference to use questionable negotiation tactics and that Mexican negotiators preference to use questionable negotiation tactics in intra-cultural negotiations is less than that in cross-cultural negotiations, while, for both Canadian and U.S negotiators, the preference to use questionable negotiation tactics in intra-cultural and cross-cultural negotiations were not significantly different. Thus, these results suggest that culture (or in-group bias based on culture) is a determinant of trust for Mexican business people while it is not a determinant of trust for Canadian and U.S business people.

In contrast to these findings, Yuki, Maddux, Brewer and Takemura (2005) used two experiments to explore differences in trust 'in an unknown person' across western and eastern cultures (i.e. U.S and Japan) and found that Americans trusted in-group members more than out-group members, which they also found true for Japanese participants. Thus, indicating that differences in cultures did not impact the importance of in-group bias as a determinant of trust.

Bstieler and Hemmert (2008) found that communication quality and fairness have a positive impact and unresolved conflicts have a negative impact on trust in vertical

product development partnerships in both South Korea and Austria and that the impact of the three factors is stronger than any direct or moderating influence of culture thus indicating that these relationships are universal rather than culturally specific. However, they also found that the positive impact of communication quality and the negative impact of unresolved conflicts is stronger in Austria than in South Korea. Even though this study did not find differences in the antecedents of trust across the two countries, however, it is possible that national culture had an impact on strengthening the relationship between the two aforementioned antecedents and trust in one of the countries.

In relation to the trustworthiness determinants of trust (which is one of the research themes examined in this thesis), there are a number of empirical studies that examined the impact of these factors on trust across different cultures. However, one limitation of these particular 'cross-cultural' studies is that they are relatively few. For example, Ferrin and Gillespie (2010) comprehensive review of the cross cultural trust literature appears to have found and included only two studies that explicitly explored or highlighted the impact of the three trustworthiness characteristics on trust across and within cultures.

In a single country study that compares trust in the indigenous culture to trust as depicted in western models, Tan and Chee (2005, previously reported) found that trust development in work contexts within the Confucian society/culture was facilitated by a generalised set of trust conditions which are consistent with those (i.e. ability, benevolence and integrity) found in western trust literatures. However, in addition to the three trustworthiness factors facilitating trust development within the Confucian setting, they also concluded that context is salient for the development of trust since they found 'emic' antecedents or trustworthiness indicators in horizontal and lateral work relationships. For example, they found that in relationships with subordinate's, antecedents such as diligence, respect for authority, thriftiness, perseverance, filial piety and loyalty emerged as indicators of a trustworthy person. As for relationships with managerial peers, they found that collective efforts, humbleness and harmonious relationship emerged as trustworthiness characteristics.

Wasti et al. (2011) conducted a cross national (i.e. Turkey and China), interview based study and found that the three components of trustworthiness (i.e. ability, benevolence

and integrity) were crucial for building trust within both Turkey and China. Furthermore, they found some culture specific or 'emic' manifestations of the trustworthiness factors. For example, they found that manifestations of benevolence in Turkey are more related to intimacy and experiences in the personal domain (e.g. personalised generosity) while benevolence manifestations in China are related to cooperation and support in the professional domain.

Another single country study (i.e. Singapore) was that of Tan and Lim (2009) who found that only Benevolence and integrity were significantly and positively related to trust in co-workers.

In relation to these trustworthiness components, Ferrin and Gillespie (2010) concluded that there is empirical evidence to support that these components are universal; while there are also culture specific manifestations of these components and additional 'emic' aspects of trustworthiness in some countries.

#### **1.2.2.2.3 The Outcomes of Trust across Cultures**

In relation to the literature on trust outcomes across cultures Ferrin and Gillespie (2010) note that there is little research in this area relative to that on the determinants of trust across cultures.

Some of these studies identified outcomes at the country level. For example, using data from the World Values Surveys, Zak and Knack (1998) found that high-trust societies (i.e. generalised trust) have higher growth and higher rates of investment. Matsuda, Harsel, Furusawa, Kim and Quarles (2001) examined the impact of generalised trust on democratic values and level of commitment to human rights using participants from four countries (i.e. Japan, South Korea, Australia and United States) and found that for Japanese and South Koreans, democratic choice is a consequence of trusting others, while for Americans and Australians, honouring individualism and tolerance towards others were the significant influencers for democratic decisions. These authors conclude that facilitators or mediators of democratic orientation and commitment to human rights may be different across cultures.

These studies are also limited in terms of their conceptualisation of trust as generalised trust in others. However, other studies examined outcomes of trust in specific individuals. For example, the empirical findings reported by Elahee et al. (2002,

previously reported) established the negative association between trust in an opponent negotiator and preference for using questionable negotiation tactics in samples from Canada, Mexico and United States. Yamagishi, Cook and Watabe (1998) conducted two experiments in the United States and Japan and found that for both American and Japanese participants, social uncertainty facilitated commitment formation and that low trustors (in terms of general trust) formed committed relationships more strongly and more frequently than high trustors.

As can be observed from the range of outcomes in these studies, these outcomes did not include those examined in this thesis (i.e. interpersonal citizenship behaviours and antisocial work behaviours). Although, there are a number of single country studies in non-western countries examining the relationship between trust and a number of outcomes (some of which are examined in this thesis). For example, in a study in Malaysia, Abdul Rahim and Nasurdin (2008) found that trust in organisation was negatively and significantly related to deviant behaviours directed at the organisation. In a study in Singapore, Tan and Lim (2009) found that trust in organisation was positively and significantly related to organisational commitment. Furthermore, in a study in Oman, Redman et al. (2011, previously reported) found that trust in organisation, trust in direct boss and trust in co-worker were all positively associated with affective commitment to the organisation and negatively associated with quit intent, while both trust in organisation and trust in direct boss were also positively associated with job satisfaction. Furthermore, they found that trust in organisation was positively associated with OCB-O (i.e. helping behaviours targeted at the organisation) and OCB-I, trust in boss was negatively associated with OCB-I, while trust in co-workers was positively associated with OCB-I.

Based on their comprehensive review of the cross cultural trust literature, Ferrin and Gillespie (2010) concluded that there is substantial empirical evidence in support of the view that there are both universal and culturally-specific antecedents and outcomes of trust.

These same authors highlight the limitations of the cross cultural trust literature by noting that their conclusions should be considered preliminary because of the limited number of countries examined and the limited replication of findings in this literature.



Thus, given these limitations, it is important to replicate findings in countries not selected by previous research (e.g. Jordan).

An electronic search for the combined keywords ‘trust’ and ‘Jordan’ was conducted on the ‘Web of Science’ database. Search results did not include any ‘empirical’ studies relevant to the research themes emphasised in this thesis. For example, a number of the empirical studies that were found (e.g. Alomari, 2014; Alomari, Woods and Sandhu, 2012) examined the role of trust (i.e. trust in internet or trust in government) alongside other variables on the adoption of e-government services in Jordan.

Other studies were in the marketing domain. For example, Abbad (2013) examined the factors (e.g. trust in the branch and its staff) affecting customers’ adoption of e-banking in Jordan. Furthermore, in a qualitative study, Jraisat, Gotsi and Bourlakis (2013) found that commitment in the producer-exporter relationship (which includes trust between the two) is one of the drivers for information sharing in agri-food export supply chains in Jordan.

However, none of these studies empirically examined how interpersonal trust is conceptualised in Jordan compared to extant conceptualisations of trust in the west, nor did they include any empirical examination of the antecedents and outcomes of interpersonal trust in organisational members (i.e. manager, subordinate, co-worker) within work settings in Jordan. However, while reviewing the literature on cross-cultural trust, one inter-cultural study was found that is relevant to some of the research themes examined in this thesis. Using observations and interviews, Mizrachi et al. (2007, p.154) explored trust relations between Israeli and Jordanian managers in an Israeli-Jordanian industrial site and reported that “Jordanians often associated trust with human motives and intentions rather than with an evaluation of professional competence and quality assurance” while Israeli managers used competence-based trust. Moreover, these authors reported that when the political climate changed, Israeli managers changed their trust approach to a normative one and Jordanian managers changed theirs to a competence-based approach. This study indicates that trust formation for Jordanians is mainly based on the benevolent intentions of the trustee, thus suggesting that benevolence is very prominent for Jordanians when forming trust in another party.

However, even though this study provides insights on differences in trust building processes of Jordanian and Israeli managers, it was an inter-cultural study focusing on trust between two parties from different cultures whereas the two studies reported in this thesis are single country studies that examine the meaning, development and outcomes of trust among co-workers from the same culture.

Thus, given this lack of studies on interpersonal trust within Jordanian organisations and between members of these organisations, there is a need to conduct more studies on interpersonal trust within these setting. The importance or justification for addressing this gap was presented in the introduction of this chapter.

Furthermore, even though there is a scarcity of studies on trust in Jordanian organisations, a number of empirical examinations of interpersonal trust in different foci within Middle Eastern countries were found. For example, Redman et al. (2011, previously reported) examined the relationships between trust in different organisational foci and outcomes approximate to the respective foci using data gathered from Omani military personnel. Wasti et al. (2011, previously reported) examined the antecedents of trust in different foci (i.e. supervisor, subordinate and peer) in two countries one of which is a Middle Eastern country (i.e. Turkey).

Other studies found were single country studies. For example, in a single country study in Iran, Mirza and Redzuan (2012) found a significant and positive relationship between a teacher's trust in his organisation and commitment to the organisation. Similarly, in a study in the Turkish healthcare industry, Akdere, Gider and Top (2012) found that organisational trust has a significant effect on organisational commitment. Moreover, in a sample of employees from two Turkish hospitals, Top, Tarcan, Tekingündüz and Hikmet (2013) found that organisational trust is a significant predictor of organisational commitment. Using data collected from firms in Turkey, Dayan (2010) found that trust in manager is significantly related to team commitment and longevity, and these two variables significantly mediated the relationship between managerial trust and product success and managerial trust and team learning. In another study from Turkey, Akgün, Keskin, Byrne and Imamoglu (2007) found that trust among project team members has a positive impact on team potency during the project. These studies highlight and confirm some of the positive outcomes of organisational trust, managerial trust and co-worker trust in Middle Eastern contexts.

Other studies highlighted the antecedents of trust in particular foci within Middle Eastern contexts. For example Toh and Srinivas (2012) examined the relationship between host country nationals and their expatriate co-workers in Oman and found that the perception of expatriate task cohesiveness is significantly and positively related to host country national co-worker's trust in the expatriate and that trust in the expatriate is significantly and positively related to sharing information with the expatriate. Another study in Turkey by Dayan and Di Benedetto (2010) found that demographic diversity, proximity of team members, team longevity, procedural justice and interactional justice were positively related to trust among members of new product development teams and that trust among team members is positively associated with team learning and product success. Lastly, in a study in Saudi Arabia, Al-Ghobain, Al-Drees, Alarifi, Al-Marzoug, Al-Humaid and Asiry (2012) found that most patients prefer that physicians wear formal attire, however, they found that trust in a physician is not related to the physician's attire or external appearance.

Other studies were also found on trust in Middle Eastern countries. However, these studies are less relevant to the emphasis of this thesis than the aforementioned studies. For example, in a study in Cyprus, Leonidou, Leonidou and Kvasova (2013) found that consumer perceptions of unethical marketing behaviour decreases consumer trust in the firm. In a study in Egypt, El Malla, Kreicbergs, Steineck, Wilderäng, Elborai and Ylitalo (2013) examined predictors of parents (of children with cancer) trust in health-care professionals and in medical care and found that parents trust in medical care was significantly associated with the following: receiving at least moderate information about the disease and the treatment, availability of opportunities to communicate with the child's physicians, satisfaction with the physician's conversation style, physicians sensitivity to the parents emotional needs and physicians having met the parents with care. Bazyar, Teimoury, Fesharaki, Moini and Mohammadi (2013) Examined the links among power, risk and governance in inter-firm arrangements within new product development teams in Iran and found that a firms perception of relational risk is significantly and negatively associated with the firms trust in its partner firm. Riffai, Grant and Edgar (2012) found that trust in online banking is significantly and positively related to Omani consumer behavioural intention to use online banking. Eid (2011) found that perceived security and perceived privacy and user interface quality are significant determinants of consumer trust in business-to-consumer e-commerce

websites. In sum, these studies covered either relationships between two firms or relationships between members of an organisation and consumers, and some focused on trust foci that are related to the services provided by the organisation. Such relationships are outside the scope of this study which focuses mainly on relationships among organisational members.

### **1.2.3 Trust in Co-worker**

Despite the extensive literature examining the antecedents and outcomes of trust within and across different work relationship contexts, the literature on trust in lateral relationships (e.g. Redman et al., 2011; Semercioz, Hassan, Aldemir, 2011; Knoll and Gill, 2011; Dunn et al., 2011; Han, 2010; Dayan and Di Benedetto, 2010; Yakovleva, Reilly and Werko, 2010; Holste and Fields, 2010; Tan and Lim, 2009; Thomas, Zolin, Hartman, 2009; Lau and Liden, 2008; Webber, 2008; Forret and Love, 2008; Bijlsma-Frankema, Jong and Van de Bunt., 2008; Ferrin et al., 2006; Ladebo, 2006; Ferres et al., 2004; Langfred, 2004; Ferrin and Dirks, 2003; Costa, 2003; Gould-Williams, 2003; Settoon and Mossholder, 2002; McAllister, 1995) is relatively smaller than that on trust in hierarchical relationships (e.g. Knoll and Gill, 2011; Semercioz et al., 2011; DeConinck, 2010; Dayan, Di Benedetto and Colak, 2009; Yang et al., 2009; Bijlsma-Frankema et al., 2008; Moye and Henkin, 2006; Tzafrir, Harel, Baruch and Dolan, 2004; Connell, Ferres and Travaglione, 2003; Kerkhof, Winder and Klandermans, 2003; Gilder, 2003; Albrecht and Travaglione, 2003; Kiffin-Petersen and Cordery, 2003; Dirks and Ferrin, 2002).

In relation to trust in hierarchical relationships (e.g. leader, manager, supervisor), Dirks and Ferrin (2002) conducted a meta-analysis of research findings over the past four decades in relation to the primary relationships between trust in leadership and its antecedents, outcomes and correlates using 106 samples. Dirks and Ferrin (2002) found that in terms of antecedents, transformational leadership, organisational support, interactional and procedural justice, transactional leadership and distributive justice, participative decision making, unmet expectations, propensity to trust all had significant relationships with trust in leadership. As for outcomes, Dirks and Ferrin (2002) found that trust in leadership had a significant relationship with different types of organisational citizenship behaviours (i.e. altruism, civic virtue, conscientiousness, courtesy and sportsmanship), job performance, job satisfaction, organisational

commitment, turnover intentions, belief in information provided by the leader and commitment to decisions. Finally, in relation to correlates, they found that trust in leadership was highly associated with satisfaction with leader and Leader-member exchange (LMX). However, this meta-analysis did not provide insight on the antecedents and outcomes of trust in co-worker relationship contexts. However, this meta-analysis did not provide insight on the antecedents and outcomes of trust in co-worker relationship contexts and did not include outcomes (except for quit intention) that are negative in nature (e.g. counterproductive behaviours). Moreover, 'positive expectations' appears to be the conceptualisation of trust they adopted in their meta-analysis since they adopted McAllister's (1995) view on trust as cognitive-based and affective-based trust. Thus, it is not known or clear to what extent the antecedents and outcomes they identified are related to trust as 'willingness to be vulnerable'.

In relation to trust in a co-worker and in terms of work relational contexts emphasised within this stream of research, the literature on co-worker trust focused on examining trust in foci under various terminologies (e.g. co-worker, peer, team member, virtual team member, colleagues). That is, this literature focused on relational contexts either defined by organisational position (i.e. employee co-workers, manager co-workers), or by work arrangements or settings in which these relationships are embedded (i.e. team members/colleagues, virtual team members/colleagues). Within these co-worker relational contexts, researchers focused on identifying the antecedents and outcomes of trust. Additionally, researchers also examined relationships among trust in different organisational foci. The findings of these three research themes are reviewed next before highlighting the limitations of these streams of research.

#### **1.2.3.1 Antecedents of Co-worker Trust**

The co-worker trust literature has identified and examined a wide range of co-worker trust antecedents (e.g. frequency of interaction, peer behaviours, third party influences, justice perceptions, trustworthiness factors) in both traditional co-worker contexts and team contexts. For example, McAllister (1995) examined the antecedents of trust between managerial peers. He found that reliable role performance, cultural-ethnic similarity and strong professional credentials were not significantly related to cognition-based trust, however, frequency of interaction with the peer and interpersonal citizenship behaviours by the peer were significantly and positively related to affect-

based trust. Lau and Liden (2008) examined the role of third parties in the workplace (i.e. group leader) on the formation of trust between co-workers. They found that employees place more trust in co-workers who are also trusted by the teams' leader than in co-workers who are less trusted by the leader. Moreover, Forret and Love (2008) found that distributive, procedural and interactional justice predicted trust in co-workers.

A number of studies (e.g. Knoll and Gill, 2011; Wasti et al., 2011; Gill et al., 2005) have also provided empirical evidence (either qualitative or quantitative) that supports the applicability of the integrative model of organisational trust (i.e. the antecedents of trust proposed by Mayer et al., 1995) to the context of co-worker relationships within organisations and shown that ability, benevolence and integrity are related to trust in co-workers. For example, Gill et al. (2005) conducted two studies to examine the antecedents of trust proposed by Mayer et al. (1995) in co-worker relationship contexts and found that the perceived ability, benevolence and integrity of a trustee predicted the trustors intention to trust. In addition, they found that propensity to trust predicted intention to trust when information about the ability, benevolence and integrity of the trustee was ambiguous. Similarly, Knoll and Gill (2011, previously reported) found that propensity to trust in addition to the perceived ability, benevolence and integrity of the trustee were all positively and significantly correlated with trust in peer. Wasti et al. (2011, previously reported) found in their qualitative study that ability, benevolence and integrity of the trustee played equal roles in determining trust in peer Chinese sample, while in the Turkish sample, trust in peer formation was benevolence driven. A result that Wasti et al. (2011) attributed to the fact that participants in the Turkish sample were mostly talking about co-workers with whom they did not have very interdependent work relations. Tan and Lim (2009) showed only partial support for the integrative model of organisational trust, reporting results showing that only benevolence and integrity were positively and significantly associated with trust in co-workers.

Moreover, some studies examined the influence of these trustworthiness factors on co-worker trust within team and virtual team contexts. For example, using a sample consisting of 75 teams, Jarvenpaa, Knoll and Leidner (1998) explored the antecedents of trust within a global virtual team context and found that in the early stages of teamwork, trust in team members was most strongly predicted by perceptions of other team members integrity while benevolence was the weakest predictor and the effect of

perceived ability on trust decreased over time. As for propensity to trust, they found that it had a significant and unchanging effect on trust in team members. Similarly, Jarvenpaa, Shaw and Staples (2004) found that initial trustworthiness beliefs of team members and early communication levels of other team members positively impacts each team member's early trust in the team. Furthermore, Yakovleva et al. (2010) examined the antecedents of co-worker trust in dyads within teams (some were collocated while others were virtual) and found that the trustor's propensity to trust was positively and significantly associated with trust in the co-worker and that this relationship is stronger in virtual dyads than in collocate dyads. They also found that the three perceived trustworthiness factors were also positively and significantly associated with trust in the co-worker.

In general, the applicability of the integrative model of organisational trust to relationship contexts involving two types of trust referents (i.e. leader, co-worker) is well established in the literature. For example, After the identification of relevant articles (i.e. those assessing either trustworthiness, trust propensity or trust while involving a sample of adults working in a task-focused environment; those exploring the relationship between a trust relevant variable and one or more antecedent or outcome; those that possess information that can be coded, that is, those containing a zero-order effect size that can be translated into a correlation coefficient; and those that examined trust at the individual level of analysis), Colquitt et al. (2007) conducted a meta-analysis of 119 articles (132 independent samples) examining trust in different trust referents (e.g. leader, co-worker). Then, using relevant scales (e.g. Mayer and Davis's, 1999 scales for trust relevant variables) and definitions from relevant conceptual articles (e.g. Mayer et al.'s, 1995 paper) while excluding scales that conceptualise and measure trust as 'positive expectations', Colquitt et al. (2007) coded the variables in these studies into categories (i.e. ability, benevolence and integrity; propensity to trust, trust, risk taking, task performance, citizenship behaviours and counterproductive behaviours). Finally, Colquitt et al. (2007) carried out the meta-analysis calculations (i.e. weighted mean correlations, the statistical significance of these correlations, the weighted mean correlations after correcting for unreliability, standard deviation of the corrected meta-analytic correlation and the percentage of variance explained by artifacts).

Colquitt et al. (2007) found that all three trustworthiness factors (ability, benevolence and integrity) were strongly related to trust levels, and that each factor had a unique relationship with trust when controlling for the other two factors. As for propensity to trust, Colquitt et al. (2007) found that it remained a significant predictor of trust when controlling for the three trustworthiness factors, though the magnitude of the relationship was relatively weak. Moreover, they found that trust propensity was significantly related to ability, benevolence and integrity. Colquitt et al. (2007) also found that trust referent (i.e. leader, co-worker) and the type of trust measure had little effect on the magnitude of the relationship between trust and its antecedents and outcomes. Their findings in relation to outcomes of trust are noted in the next section.

In terms of providing support to Mayer et al.'s (1995) model assumptions and propositions, Colquitt et al. (2007) note that their findings provide support to 1) the significant and unique relationships between the three trustworthiness factors and trust, 2) the significant relationship between trust propensity and trust, and 3) the relationship between trust (i.e. willingness to be vulnerable) and risk taking (i.e. the decision to become vulnerable). Colquitt et al. (2007) findings also provided support to the proposition that the Mayer et al.'s (1995) model is applicable to multiple-levels of analyses since as these authors note, their findings indicate that the referent type had little impact on the magnitude of relationships between trust and the other variables.

In addition to the studies (i.e. Jarvenpaa et al.'s, 1998; Jarvenpaa et al., 2004; Yakovleva et al., 2010) noted earlier, other studies also examined the antecedents of co-worker trust in team or virtual team settings. For example, using a longitudinal design, Langfred (2007) examined the impact of team conflict on intra-team trust and found that relationship conflict has a negative relationship with intra-team trust while task conflict did not. Webber (2008) examined the antecedent and outcomes of cognitive and affective based trust within team contexts and found that familiarity with team members was positively and significantly related to early trust. Furthermore, Webber (2008) found that citizenship behaviours exhibited by team members was significantly and positively related to affect-based trust yet not related to cognitive based trust and that monitoring behaviour was significantly and negatively related to cognitive-based trust. Dayan and Di Benedetto (2010, previously reported) found a number of antecedents positively impacting trust among members of new product



development teams (i.e. demographic diversity, proximity of team members, team longevity, procedural justice and interactional justice).

### **1.2.3.2 Outcomes of Co-worker Trust**

The co-worker trust literature also examined a wide range of trust outcomes (e.g. interpersonal citizenship behaviours (ICB) including person-focused ICBs, empathic concern, organisational commitment, quit intentions, counterproductive behaviours, LMX, satisfaction, performance) also within traditional co-worker contexts and team contexts. For example, McAllister (1995, previously reported) examined also the outcomes of trust between managerial peers and found that cognitive-based trust is a positive predictor of affect based trust. Furthermore, he found that affect-based trust is positively associated with need-based monitoring of peers and interpersonal citizenship behaviour toward peers. Settoon and Mossholder (2002, previously reported) found that co-worker trust was positively and significantly correlated with empathic concern and person-focused interpersonal citizenship behaviour (ICB), and that empathic concern mediated the relationship between trust and person-focused ICB. Ferres et al. (2004) examined the impact of co-worker trust on some perceptual and attitudinal outcomes and found that co-worker trust significantly predicted level of perceived organisational support and affective commitment and that higher trust predicted lower turnover intentions.

Ladebo (2006) examined attitude reactions to trust among co-workers and found that affective trust in co-workers were positively related to cohesion and affective commitment while cognitive trust in co-workers was inversely related to quit intentions. Colquitt et al. (2007) found that trust was moderately to strongly related to risk taking and was moderately related to task performance and citizenship behaviours. Moreover, Colquitt et al.'s (2007) also found that trust in different foci (i.e. managers, co-workers) had a moderately negative association with counterproductive behaviours. Thomas et al. (2009) found that quality of information was positively associated with trust in co-workers which in turn positively influenced perceptions of organisational openness. Han (2010, previously reported) found that trust in peers was positively related to leader-member exchange (LMX) and that LMX mediate the relationship between trust in peers and career satisfaction. Holste and Fields (2010) found that affect-based and cognitive-based co-worker trust were positive and significant predictors of willingness

to share and use tacit knowledge. Semercioz et al. (2011) found that co-worker trust was positively and significantly associated with strategic innovativeness. Redman et al. (2011, previously reported) found that trust in co-worker is positively related to altruism towards individuals and affective commitment to the organisation while being negatively associated with quit intent.

Similar to studies examining the antecedents of trust, some of the studies examining the outcomes of trust focused on co-worker relationships within team or virtual team contexts. For example, Kanawattanachai and Yoo (2002) found that in virtual team contexts, the level of cognition-based trust is higher than the level of affect-based trust at different stages of the project the team is involved in (i.e. beginning, midpoint and end) and that teams with high performance are more likely to show initial cognitive-based trust than teams with low performance. However, they did not find a significant relationship between team performance and initial affect-based trust within the team. Costa (2003) examined the relationship between work team trust and a number of outcomes (i.e. team satisfaction, task performance, attitudinal and continuance organisational commitment) and found that trust between team members was positively related to team satisfaction, perceived task performance and attitudinal commitment while being negatively associated with continuance commitment.

Kiffin-Petersen and Cordery (2003) found that within self-managing team contexts trust in co-workers was positively related to preference for teamwork. Furthermore, Langfred (2004) examined the relationship between trust and performance in self-managing teams and found that intra-team trust was significantly and negatively related to monitoring in team. In addition, Langfred (2004) found that high levels of intra-team trust was related to low levels of team performance when individual autonomy was high, yet related to high levels of performance when autonomy was low. Thus, according to Langfred (2004) this finding suggests that high levels of trust within a self-managing team can be harmful under certain conditions. In his longitudinal study, Langfred (2007) also examined the impact of intra-team trust on individual autonomy in a team and on task interdependence and found a significant positive relationship indicating that lower trust is associated with lower autonomy, however, trust was not significantly associated with task interdependence. Moreover, in addition to her findings relating to the antecedents of trust, Webber (2008) also found that affective based trust is positively and significantly related to team performance and that cognitive trust was not significantly

related to team performance. Bijlsma-Frankema et al. (2008) examined antecedents of performance in team contexts and found that trust in team members was positively and significantly correlated with future team performance.

In addition to their findings (in relations to trust antecedents) noted earlier, Yakovleva et al. (2010) also found that trust in co-worker has a significant effect on organisational citizenship behaviour. Dayan and Di Benedetto (2010, previously reported) found a number of outcomes (i.e. team learning and product success) that are positively impacted by trust among team members.

As for Chang, Chuang and Chao (2011) examined the relationship between trust in addition to other variables and performance within a virtual team context. Using a qualitative method, they found that trust among virtual team members, communication quality and cultural adaptation have positive effects on the virtual team's performance.

#### **1.2.3.3 Relations among Trust in Different Referents**

In relation to the outcomes or correlates of co-worker trust and in addition to the findings of Lau and Liden (2008) highlighted earlier, empirical evidence from other studies has also supported the existence of positive relationships among and between trust in different referents (supervisor, peer, subordinate and organisation). For example, Knoll and Gill (2011, previously reported) found that trust in supervisor was positively related to trust in co-worker and trust in subordinate. They also found that trust in subordinate and trust in co-worker were positively related, though the result was not statistically significant. Redman et al. (2011, previously reported) found that trust in co-workers and trust in boss were both positively associated with trust in the organisation. Similarly, Tan and Lim (2009, previously reported) found a positive association between trust in organisation and trust in co-workers.

#### **1.2.3.4 Limitations**

As noted in the introduction of this chapter, one limitation of the literature examining the antecedents and outcomes of co-worker trust, in addition to the literature examining relations among trust in different organisational foci, is that this literature focused mainly on relationship dyads that are either defined by organisational position or by the work contexts within which the work relationship is embedded (i.e. work team contexts) while overlooking other work relationship contexts where the parties in the dyadic

relationship are defined by their employment status. Thus, there is a blind spot in this literature in terms of whether or not the Mayer et al.'s (1995) model is generalizable to co-worker contexts involving permanent and contingent employees, and whether or not the relative importance of the trustworthiness factors differs across the six co-worker contexts (highlighted in the introduction) involving different combinations of permanent and contingent employees.

Furthermore, there is also a blind spot in relation to the links between trust and the positive and negative behaviours of parties involved in these co-worker contexts that exist within a blended workforce. As noted in the introduction of this chapter, most of the literature examining the outcomes of trust (either in hierarchical or lateral relationships) focused on positive outcomes of trust; while less emphasis was given to outcomes that are undesirable by the organisation. The few studies that do examine links between trust and negative behaviours within organisations mostly examine this relationship in hierarchical relationships, while overlooking lateral relationships. For example, a search for empirical studies that link trust to antisocial work behaviours/workplace deviant behaviour revealed very few examples. That of Thau et al. (2007) examined the impact of trust in the organisation or in organisational authorities (senior management and supervisor) on antisocial work behaviour and found that perceptions of workgroup cohesion mediate the negative relationship between trust in senior management and antisocial work behaviours. It also found that the relationship between trust in supervisor and antisocial work behaviour was mediated by intentions to stay with the organisation. Finally the study found that perceptions of work group cohesion partially mediated the relationship between trust in organisation and antisocial work behaviour. Abdul Rahim and Nasurdin (2008) researched the relationship between trust in organization and workplace deviant behaviour and found that trust in organisation had a negative relationship with production and property deviance, and a positive relationship with interpersonal deviance. Pane Haden et al. (2011) examined differences between temporary and permanent employees with respect to workplace deviance tendencies, organizational commitment, organisational trust (cognitive and affective trust in supervisor) and perceived organisational fairness and hypothesised a negative relationship between workplace deviance and trust in supervisor and found that the relationship between the two variables was negative yet not statistically significant. No studies were found that linked co-worker trust to antisocial work behaviours or more

specifically that connected trust in permanent or contingent co-workers to such negative behaviours.

Furthermore, Marcus and Schuler (2004) found that general trust of employees in two German organisations was negatively and significantly associated with their counterproductive behaviours. In their conceptual paper, Litzky, Eddleston and Kidder (2006) argue that deviant behaviours are provoked by acts (e.g. inequitable or unjust treatment) that violate the trust of employees. Thus, this suggests that low levels of trust or the violated trust in the parties that perform these unjust acts provokes the deviant behaviours of the parties that are subject to these unjust acts. Furthermore, these same authors argue that the manager's untrusting attitude towards the employee is another trigger for deviant behaviour on the part of these employees. The only empirical evidence of the link between trust and antisocial behaviours within co-worker contexts was provided by Colquitt et al.'s (2007, previously reported) which empirically established a negative association between trust and counterproductive behaviours.

Finally, in relation to the literature examining the relationships among trust in different foci, there is a blind spot with regard to whether trust in a permanent peer is related to trust in a contingent peer. This is because the empirical studies examining relations among trust in different foci (noted earlier) has not considered permanent and contingent employees as trust foci.

Collectively, given these limitations, there is a need to empirically examine and to better understand the antecedents and outcomes of trust (in addition to relations between trust in different foci) in co-worker relationships defined by employment status. The importance of addressing these limitations was argued in the introduction of this chapter.

The following sections are concerned with developing hypotheses pertaining to the examination of trust in the context of relationships among permanent and contingent co-workers. The conceptual model that results from the hypotheses is designed to address the research questions three to six previously raised in the introduction of this chapter.

These sections will present the theoretical and empirical arguments upon which the development of hypotheses is based. These hypotheses pertain to the antecedents of

trust, the relative importance of trustworthiness factors for predicting trust in the respective co-worker, relationship between trust in different referents, the behavioural outcomes of trust and finally, differences in the levels of perceived trustworthiness, trust, antisocial work behaviours and interpersonal citizenship behaviours directed towards each the permanent and contingent co-worker.

## **1.3 Theory and Hypotheses**

### **1.3.1 Theory**

Within the extensive body of trust research, a number of theories and theoretical arguments were drawn upon to establish links between trust and its antecedents and outcomes within various work relationship contexts. For example, concerning the relationship between a superior and subordinate, the relationship between trust and its antecedents and/or outcomes was explained mostly using social exchange theory (e.g. DeConinck, 2010; Yang et al., 2009; Moya and Henkin, 2006; Tzafrir et al., 2004). Other studies (e.g. Dayan et al., 2009; Dirks and Ferrin, 2002) used a combination of two theoretical perspectives. Dirks and Ferrin (2002) refer to one as the relationship-based perspective such as social exchange theory and the other as the character-based perspective, reflected in models such as that of Mayer et al. (1995). A study by Kerkhof et al. (2003) used a combination of calculative based trust (i.e. instrumental view of trust) and relational models of trust (the relationship-based perspective) to explain how instrumental determinants (e.g. influence within the organisation and on management decision) and relational determinants (e.g. procedural justice) impact on trust of works council members in the management of their organisation. On the other hand, a study by Knoll and Gill (2011) used the integrative model of organisational trust developed by Mayer et al. (1995) to justify the links between trust in supervisor and its antecedents.

Empirical studies examining trust in the context of co-worker relationships also applied a variety of theories to link co-worker trust to a variety of antecedent and correlate variables. Examples of such theories are: 1) social information theory which “suggests that employee attitudes are shaped by the social context” (Lau and Liden, 2008, p. 1131), 2) balance theory which “suggests that if a leader trusts two coworkers, these coworkers will in turn trust each other, so that balance is maintained” (Lau and Liden, 2008, p. 1131), 3) integrative model of organisational trust developed by Mayer et al. (1995) which considers the characteristics of the trustee and the trustor as antecedents

that influence trust (Knoll and Gill, 2011), 4) self-evaluation maintenance model (SEM) which according to Dunn et al. (2011) suggests that any individual has a strong motivation to maintain a positive self-image and the maintenance of this self-image depends on the type of comparisons they make with others, and 5) attribution theory which “attempts to understand individuals’ causal explanations for events and occurrences, and individuals’ perceptions and judgments of others” (Ferrin and Dirks, 2003, p.19).

The review of theories that link trust to its antecedents and outcomes shows that a vast number of theories have been used to that end. Some theories (e.g. social exchange theory, the character based perspective) are relied on more than others. However, not all of these theories noted earlier are suitable for the purposes of this thesis.

When comparing and contrasting these theoretical frameworks in terms of their purpose and ability to explain relationships between the variables of interest in this thesis, this comparison shows that some of these theoretical frameworks/views were included as part of other broader theoretical frameworks. For example, in relation to the instrumental view of trust, Kerkhof et al. (2003) argued that this calculative view of trust would predict that the trustor will trust the trustee when the relationship with this trustee is perceived as being profitable. This proposition is implicit and reflected in Mayer et al.’s (1995) proposition that trust in another party is based on the perceived benevolence of the trustee. Thus, in general, the trustee demonstrating benevolence towards the trustor can cause the trustor to view the relationship with the trustee as being profitable to him/herself.

This comparison also showed that some other theories did not provide an applicable explanation for the hypothesized relationships examined in this thesis, given that they apply to relationships between variables different than or extend beyond those examined in this thesis. For example, in relations to social information theory, according to Salancik and Pfeffer, (1978) an individual’s job attitudes are explained and influenced by the social context (use of social information about what others think) rather than the individual’s predispositions and rational decision-making processes. This theory was used by Lau and Liden (2008) to explain how an employee being trusted by his/her co-workers is positively related to and based on this employee being trusted by his/her leader. Given that this theory is useful for examining the effect of the social context on

the formation of attitudes (e.g. trust), it is not suitable for explaining the relationships examined in this thesis between character-based antecedents (variables relating to the trustor predispositions and perceptions of the trustee characteristics) and co-worker trust. Similarly, Heider's (1958) balance theory is also not applicable to the relationships examined in this thesis given that this thesis does not examine the impact of third parties (e.g. leader's trust in the permanent or contingent co-worker) on the formation of trust between permanent and contingent co-workers. As for self-evaluation maintenance model, Dunn et al. (2011) used this theory to examine the impact of an employee's social comparisons with colleagues (which they argue determine the amount of threat to the employee's self-image) on his/her affective and cognitive based trust in the person they compare them-selves with. Thus, this theory is useful for understanding and predicting an individual's attitudes (e.g. trust) after performing social comparisons with others. Social comparisons with others are beyond the scope of trust antecedents examined in this thesis.

As for attribution theory, Robbins and Judge (2013) note that this theory explains how we judge others differently based on the meaning we attribute to their behaviour which when observed we attempt to determine whether the cause of the behaviour was internal (caused by the individual) or external (caused by the situation surrounding the individual). Ferrin and Dirks (2003) notes that trust development can be viewed as an attribution process through which a person may develop his/her beliefs about another party's trustworthiness based on whether the other party's behaviour is caused by internal (making inferences about another's characteristics) or situational factors. Based on these statements, this theory is useful for explaining the behaviour of others and making inferences about the cause of these behaviours (for example, inferring that the behaviour is caused by the individual's trustworthiness). Thus, this theory may be useful for explaining how trustworthiness beliefs about another are formed. However, it is not applicable to the hypothesised relationships examined in this thesis since the development of trustworthiness beliefs (i.e. antecedents of trustworthiness) in another is not examined in this thesis.

Given that the hypotheses developed and tested in this thesis mainly examine the antecedents and outcomes of trust in two different types of co-workers (i.e. permanent and contingent) in addition to exploring whether or not permanent and contingent employees differentiate between their permanent and contingent counterparts in terms



of the levels of trust, trustworthiness perceptions and behaviours towards these counterparts, some of the previously reviewed theories are selected as theoretical frameworks for the purposes of hypotheses development and building the conceptual model of this thesis, namely, these include social exchange theory, Mayer et al.'s (1995) integrative model of organisational trust, social identity theory and self-categorisation theory. When compared to the previously reviewed theories (e.g. social information theory; balance theory; self-evaluation maintenance model; attribution theory), these theoretical frameworks provide more ample explanation for the relationships between the variables of interest in this thesis.

The merits of the theoretical frameworks selected and the hypothesised relationships they are concerned with are discussed next.

The propositions of the Mayer et al.'s (1995) model (i.e. the 'character based perspective' as dubbed by Dirks and Ferrin, 2002) are drawn upon to make the argument that the level of trust in a permanent or a contingent co-worker is determined by the trustor's propensity to trust and his/her perceptions of the trustee's ability, benevolence and integrity. That is, this theoretical framework is drawn upon to theorise the relationship between trust and its antecedents. The emphasis of the Mayer et al.'s (1995) model on trust antecedents that are robust and applicable across different levels of analyses and across different relational contexts (Schoorman et al, 2007) is useful to the examinations carried out in this thesis as it allows for the examination of trust antecedents within a number of different co-worker relational contexts simultaneously (i.e. six co-worker relationship contexts were identified when using employment status to define the parties involved in the dyadic relationship). Moreover, the propositions of the Mayer et al. (1995) model emphasising the concepts of propensity to trust and the three trustworthiness factors are useful for understanding how trust in a permanent or contingent co-worker is developed within these different co-worker relational contexts.

Mostly, this thesis draws upon the principles of social exchange theory (Blau, 1964; Cropanzano and Mitchell, 2005), namely, what Dirks and Ferrin (2002) refer to as the 'relationship based perspective' to theorise and provide support to most of the hypotheses developed in this thesis. That is, the propositions of social exchange theory are drawn upon to:

- 1- Provide insight on how trustworthiness develops within social exchanges among co-workers within a blended workforce.
- 2- Make the argument that the level of trust in a co-worker (i.e. permanent and contingent) can impact the level of interpersonal citizenship behaviours and antisocial behaviours towards the respective co-worker.
- 3- Provide some arguments as to why it is expected that employees will differentiate between their permanent and contingent co-workers in terms of perceptions, attitudes and behaviours towards these referents.

Social exchange theory's (Blau, 1964; Cropanzano and Mitchell, 2005) emphasis on the norm of reciprocity is useful for understanding one of the mechanisms through which trust develops within social exchange relationships. Furthermore, the way reciprocity is characterised within social exchanges (e.g. frequency of reciprocal exchanges) can provide some explanation for why employees are expected to differentiate between their permanent and contingent counterparts in terms of trust, trustworthiness perceptions and behaviours. Finally, this theory's emphasis on the role of trust within social exchange relationships is essential for grasping an understanding of how trust facilitates and produces the exchanged behaviours (either desirable or undesirable) between the parties involved in the relationship dyad. These merits of social exchange theory are supported by a number of scholars, for example, according to Brower, Lester, Korsgaard and Dineen (2009) social exchange theory is a useful framework for understanding the relationships between trust and its outcomes such as task performance, citizenship behaviours and counterproductive behaviours. Similarly, Cropanzano and Mitchell (2005) note that social exchange theory is one of the most influential conceptual paradigms for understanding behaviour at the workplace. DeConinck (2010) suggests that social exchange theory is one of the most important paradigms for understanding employees' attitudes. Blau (1964) notes that the prevalence of social exchange makes it tempting to consider all social behaviour in terms of exchange.

Finally, to test whether permanent and contingent employees will differentiate between their permanent and contingent counterparts in terms of trust, trustworthiness perceptions, interpersonal citizenship behaviours and antisocial behaviours, social identity theory and self-categorisation theory are drawn upon. Ekmekci and Casey (2011) note that the social identity approach has resulted in two major theories: social identity theory and self-categorization theory. According to Hepburn (2003) social

identity theory was developed by Henri Tajfel along with John Turner, who also developed self-categorization theory (a modified version of social identity theory). The emphasis of these two theories on the concepts of 'in-group', 'out-group' and 'in-group bias' is useful for understanding and predicting the levels of an individual's perceptions, attitudes and behaviours towards members of his/her in-group compared to the levels of those he/she holds and exhibits towards members of an out-group. Furthermore, testing the notions and predictions of these theories in the relational contexts examined in this thesis can provide 'additional' empirical evidence that employment status is a valid categorisation used by employees to form their in-group and out-group perceptions.

#### **1.3.1.1 The Integrative Model of Organisational Trust, Mayer et al. (1995)**

Mayer et al.'s (1995) integrative model of organisational trust proposes that two factors will affect or determine the level of trust one party (the trustor) has for another (the trustee): 1) the perceived characteristics or attributes of the trustee represented by three trustworthiness factors; ability, benevolence and integrity, and 2) the characteristics or traits of the trustor represented by the trustor's propensity to trust.

Concerning the characteristics of the trustee (or the characteristics/factors of trustworthiness), Mayer et al. (1995) note that the characteristics and actions of the trustee will lead the trustee to be more or less trusted by others and they further argue that these characteristics are important for understanding why some parties are more trusted than others. Tan and Lim (2009) note that since many characteristics of trustworthiness have been mentioned in the literature, the Mayer et al.'s model focused only on the three most prominent factors of trustworthiness. Moreover, according to Dietz and Den Hartog (2006) each one of the following trustee attributes: ability, benevolence, integrity and predictability, is significant in itself in any assessment of another's trustworthiness, and trust in another is expected to founder if any of the attributes are absent from the trustee. Colquitt et al. (2007, p.910) supports this by stating that "the concept of trustworthiness is central to understanding and predicting trust levels". Similarly, it is argued that "a trusting relationship is more likely to develop if a particular trustee is perceived as having high ability, benevolence, and integrity" (Gill et al., 2005, p.289).

Ability or competence refers to "the other party's capabilities to carry out her/his obligations (in terms of skills and knowledge)" (Dietz and Den Hartog, 2006, p.560).

Similarly, Colquitt et al. (2007) refer to ability as capturing the ‘can-do’ component of trustworthiness by describing whether the trustee has the abilities and skills required to act appropriately, and in contrast they refer to benevolence and integrity as character variables capturing the ‘will-do’ component of trustworthiness by describing whether the trustee will use those abilities to act in the best interest of the trustor. Tan and Lim (2009) argue that in organisational contexts, co-workers often transmit information or relay pieces of work to one another, which suggest that their competence and skills have a significant effect on the work of fellow co-workers. Therefore, “if employees believe that they can depend on their coworkers to produce a quality piece of work that would affect their job in a positive way, they will be willing to trust the judgment of those competent coworkers” (Tan and Lim, 2009, p.49).

Benevolence is defined as reflecting “benign motives and a personal degree of kindness toward the other party, and a genuine concern for their welfare” (Dietz and Den Hartog, 2006, p.560). Tan and Lim (2009) note that when an employee perceives his/her co-worker as considerate and concerned about his/her interest and welfare, the employee will more willingly trust his/her co-worker because the co-worker is unlikely to act maliciously against the employee.

As for integrity, it is defined as the extent of “adherence to a set of principles acceptable to the other party, encompassing honesty and fair treatment, and the avoidance of hypocrisy” (Dietz and Den Hartog, 2006, p.560). The definition of integrity suggests according to Tan and Lim (2009) that if the values of the trustee are acceptable to the trustor, the trustor will be more prepared to accept the influence of the trustee. Furthermore, “researchers believe that trust in coworkers is higher in coworkers who are perceived to have integrity, because these coworkers can be expected to act with honesty, consistency, and justice” (Tan and Lim, 2009, p.50).

The second factor to impact levels of trust for another in the integrative model of organisational trust is the trustor’s propensity to trust. According to Colquitt et al. (2007), propensity to trust refers to a stable individual difference that reflects an individual’s dispositional willingness to rely on another individual. According to Mayer et al. (1995) propensity to trust will influence the level of trust that the trustor has for a trustee prior to data on that particular trustee being available. This is also supported by McKnight et al. (1998) who argue that initial trust between two individuals is not based

on first-hand knowledge of or experience with the other individual, but rather on the trustor's disposition to trust or on institutional cues that make it possible for the trustor to trust the other individual without first-hand knowledge. However, Bigley and Pearce (1998, p.411) state that "as people become more acquainted with specific others, their personal knowledge of those others becomes the primary driver of their thoughts and actions". These arguments suggest that propensity to trust becomes important in predicting trust when trustworthiness information is limited or unavailable, yet this role becomes less important when more trustworthiness information becomes available. However, Colquitt et al. (2007) suggest that the effects of propensity to trust on trust formation may continue affecting trust even when trustworthiness information becomes available to the trustor.

### **1.3.1.2 Social Exchange Theory**

Concerning the nature of social exchange, Blau (1964) notes that social exchange can be observed in many social relations as an exchange of activity that is more or less rewarding or costly between at least two persons. It refers to "voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others" (Blau, 1964, p.91). Furthermore, according to social exchange theory (Blau, 1964) the occurrence of an interaction between an individual and another party where rewarding services are supplied by this other party will result in the generation of a felt obligation to reciprocate to this other party, yet this reciprocation is neither bargained with nor forced by the other party and its nature is unspecified, and this unspecified obligation is the basic and most crucial distinction between social exchanges and economic exchanges.

According to Van Dyne and Ang (1998) the norm of reciprocity is a central concept in social exchange theory. Similarly, Cropanzano and Mitchell (2005) state that among the rules of social exchange, reciprocity or repayment in kind is most likely the best known exchange rule. Yet, "the norm of reciprocity might take the negative form as well, which includes the expectations that hostilities, fear, insincerity, and other distrusting acts will be dealt with in kind" (Tzafrir et al., 2004, p.630).

In the context of the workplace or working relationships, such as that between two co-workers, Thau et al. (2007) state that employees interpret their relationship with members in the organisation as an interdependent, social exchange. With regard to these

relationships, Mayer et al. (1995) state that there is risk inherent in working relationships. And one source of risk in relationships according to Rousseau et al. (1998) is the uncertainty regarding whether the other party intends to, and will, act appropriately. These statements suggest that risk in a social exchange relationship arises from the uncertainty felt by an individual regarding whether the other party intends to and will reciprocate.

In relation to the development of trustworthiness perceptions (and consequently trust) within social exchanges, Redman et al. (2011) notes that evidence on the trustworthiness of the other party is gathered while the frequency and number of exchanges between the two parties increase, when this evidence is gathered it facilitates further exchanges and trust emerges through this repeated exchange of benefits between the two parties involved in the social exchange.

Concerning the role trust plays in social exchange relationships and the impact it has on the inherited risk in these relationships, DeConinck (2010, p.1350) states that “[T]rust is an important element of social exchanges because when one person provides a benefit to another person, the person must trust that the other party will reciprocate”. Similarly, according to Byrne, Pitts, Chiaburu and Steiner (2011, p.111) “social exchange relies on trust – trust that interactions will ignite obligation in the partners, such that each will reciprocate in order to fulfil his or her obligation”. Furthermore, Blau (1964, p.94) states that “since there is no way to assure an appropriate return for a favor, social exchange requires trusting others to discharge their obligations”. These arguments suggest that trust eliminates or reduces the inherited risk in the exchange relationship, or stated differently, it reduces the uncertainty of whether the exchange partner will reciprocate and discharge his/her obligation.

Moreover, according to Thau et al. (2007) when an employee trusts his/her exchange partner, he/she is likely to comply with the normative requests of this exchange partner to maintain the exchange relationship, and when an employee has little trust in his/her exchange partner it will be more likely for him/her to act in self-protective and self-interested ways. These arguments pertaining to the role of trust in exchange relationships and the consequences of high and low levels of trust in the exchange partner suggest that when trust in the exchange partner is low, the perceived uncertainty and risk in the relationship with the exchange partner will be high, since trust will not be

there to remedy or reduce the inherited risk in the exchange relationship, thus the employee will act in self-concerned ways to protect him/herself and avoid risk. These arguments also suggest that when trust is absent or lacking in the exchange relationship, the other available alternative to deal with the risk inherited in exchange relationships would be to act in self-protective ways that reflect self-interest. Moreover, Thau et al. (2007, p.1159) state that “behaviors that violate the concern for others, such as antisocial work behaviors, are thus more likely to occur in exchange relationships in which the employee is primarily self-concerned”. Pane Haden et al. (2011) support this by indicating that most research suggests there is a negative association between trust and workplace deviance. Thus, it is argued that “as social exchange relations build trust over time, trust prohibits antisocial work behaviors by reducing self-interest and promoting other-concern” (Thau et al., 2007, p.1156).

#### **1.3.1.3 Social Identity Theory and Self-Categorization Theory**

In relation to social identity theory, Myers (2005) notes that our sense of who we are - (our self-concept) comprises not just our sense of our personal attributes and attitudes (our personal identity) but a social identity. This social identity, according to Tajfel (1981, p.255) represents “that part of an individual’s self-concept which derives from his knowledge of his membership of a social group (or groups) together with the value and emotional significance attached to that membership”. Hence, according to Tajfel and Turner (1979, p.40) the term social identity consists “of those aspects of an individual’s self-image that derive from the social categories to which he perceives himself as belonging”. Stated differently, it is “the ‘we’ aspect of our self-concept; the part of our answer to ‘who am I?’ that comes from our group memberships” (Myers, 2005, p.350).

According to Tajfel and Turner (1979) one of the assumptions underlying social identity theory is that any individual will strive to maintain or enhance positive self-esteem. Similarly, Tajfel (1981) notes that an individual’s social identity is based on the motivational assumption that this individual prefers a positive instead of a negative self-image. Thus, “people seek to derive positive self-esteem from their group memberships.” (Smith and Mackie, 2007, p.189). Myers (2005, p.351) explains that “having a sense of ‘we-ness’ strengthens our self-concepts”.

As for self-categorization theory, Turner (1991, p.155) states that “the central hypothesis is that group behaviour can be understood as individuals acting in terms of a shared identity than as different individual persons (i.e. more in terms of their personal identities). It seeks to explain variations in how people define and categorize themselves and the effects of such variations”. Similarly, according to Hepburn (2003) the theory focuses on the factors that drive people to perform particular self-categorizations, and the consequences that result from those categorizations. Self-categorization theory “aims to tackle some of the difficulties with social identity theory, where social and personal identities are no longer seen as qualitatively different forms of identity but rather as representing different forms of self-categorization” (Hepburn, 2003, p.36). Thus, according to Turner (1991) self-concepts can be thought of as self-categories and that people can categorize themselves as individual persons with differences from other individuals, as social groups with differences from other social out-groups (social identity level), and finally, as humans (superordinate level), or ‘real me’ (subordinate level).

With regard to the predictions of social identity theory and self-categorization theory, Turner (1991, p.156-157) states that “as social identity becomes salient, individual self-perception becomes *depersonalized*, i.e. people tend to perceive themselves more in terms of the shared stereotypes that define their social category membership (the attributes that define their common social identity) and less in terms of their personal differences and individuality”. Furthermore, Smith and Mackie (2007, p.189) state that social identity theory is “the theory that people’s motivation to derive self-esteem from their group memberships is one driving force behind in-group bias”. This depiction of social identity theory suggests that one consequence of deriving self-esteem from being a member of a group is in-group bias. According to Tajfel and Turner (1979) in-group bias is a ubiquitous feature of intergroup relations and is defined as the tendency to favour (both in evaluations and behaviour) the in-group over the out-group. Myers (2005, p. 351) defines an ‘in-group’ as “a group of people who share a sense of belonging, a feeling of common identity.” and an ‘out-group’ is defined as “a group that people perceive as distinctively different from or apart from their ingroup”. Tajfel and Turner (1979, p.38) state that “the mere perception of belonging to two distinct groups - that is, social categorization per se - is sufficient to trigger intergroup discrimination favouring the in-group. In other words, the mere awareness of the presence of an out-



group is sufficient to provoke intergroup competitive or discriminatory responses on the part of the in-group". These same authors further state that "intergroup categorization leads to in-group favouritism and discrimination against the out-group." (p.39). Similarly, Smith and Mackie (2007) note that one consequence of social categorization is the tendency to treat members of the 'in-group' in fair, humane and altruistic ways because of the perceived similarities with the in-group members, they state that "if in-group members are lovable and similar to us, we will want to treat them as we ourselves would like to be treated." and "when people see the world through the lens of their group memberships, what is best for the group blurs together with what is best for the individual" (p.199). thus, based on the predictions underlined in the previous statements, these theories suggest that the more an individual identifies with a group and categorizes him/herself as a member of the group, the more likely he or she is to favour that group and treat its members in the same way that he/she prefers to be treated.

In relation to the treatment of out-group members by in-group members, Smith and Mackie (2007) note that in addition to viewing out-group members as relatively more homogenous and less diverse than in-group members, in-group members also "dislike, devalue, and discriminate against out-group members, depending on the extent to which they are seen as threatening the in-group. When the out-group is simply different, it elicits mild dislike." (p.226). Furthermore, "social identity theory holds that there is a universal and fundamental human cognitive requirement for positive differentiation from others, and that this drives our antisocial behaviour." (Hepburn, 2003, p.33).

### **1.3.2 Hypotheses**

The first set of hypotheses is concerned with the antecedents of trust and draw upon notions from social exchange theory and the proposition of the Mayer et al. (1995) model to posit that through social exchanges between co-worker, evidence of the trustee's trustworthiness accumulates and this perceived ability, benevolence and integrity of the respective trustee in addition to the trustor's propensity to trust will determine the trustor's level of trust in the trustee.

Based on the notions provided by social exchange theory on how trustworthiness evidence is gathered in social exchanges (e.g. work relationships), it is expected that as the number of interactions increase within each of the six co-worker relational contexts

examined in this thesis, each respective trustor will gather more evidence of the trustworthiness of his/her respective trustee.

In line with the propositions of Mayer et al.'s (1995) integrative model of organisational trust and the empirical evidence presented earlier in the literature review on co-worker trust (e.g. Knoll and Gill, 2011; Wasti et al., 2011; Colquitt et al., 2007; Gill et al., 2005) which generally, found that the three trustworthiness factors are positively and significantly related to trust in both hierarchical and lateral work relationship contexts, it is expected that trust in a co-worker (i.e. permanent or contingent) will be a function of that co-worker's perceived ability, benevolence and integrity. Furthermore, given that the empirical evidence has so far supported the applicability of this model to work relationships involving different trust referents (leader, co-worker and subordinate), it is expected that the three trustworthiness factors will be significant in predicting trust whether the trust referent is a permanent employee co-worker or a contingent employee co-worker. Thus, the following hypotheses are proposed:

**H1:** There is a significant positive correlation (relationship) between the trustor's perception of the respective trustee's ability and trust in (a) the contingent co-worker, (b) the permanent co-worker.

**H2:** There is a significant positive correlation (relationship) between the trustor's perception of the respective trustee's benevolence and trust in (a) the contingent co-worker, (b) the permanent co-worker.

**H3:** There is a significant positive correlation (relationship) between the trustor's perception of the respective trustee's integrity and trust in (a) the contingent co-worker, (b) the permanent co-worker.

Also drawing on Mayer et al.'s (1995) propositions and empirical evidence that found a significant and positive relationship between trust propensity and trust (i.e. Knoll and Gill, 2011; Colquitt et al., 2007; Gill et al., 2005), it is expected that within each of the six co-worker relational contexts examined, propensity to trust will impact and be positively related to trust, Thus the following hypothesis is proposed:

**H4:** There is a significant positive correlation (relationship) between the trustor's propensity to trust and trust in (a) the contingent co-worker, (b) the permanent co-worker.

The second set of hypotheses is concerned with the relationship between propensity to trust and the three trustworthiness factors and draws upon arguments from the trust literature linking propensity to trust and the three trustworthiness factors. According to McKnight et al. (1998), in addition to having a significant effect on trusting intentions, disposition to trust (or the ‘faith in humanity’ component of the construct) will also have a significant effect on trusting beliefs since the already developed patterns of thinking about relationships in general tend to transfer to a specific initial relationship especially when the situation or relationship is new. This suggests that propensity to trust does not only impact trust, but it also impacts the perceived trustworthiness of the trustee and helps in trust formation especially when available information about the trustee is limited. McKnight et al. (1998) used the term ‘trusting beliefs’ to refer to one person believing the other person is competent, benevolent, honest and predictable in a situation. Based on these theoretical arguments, the following hypotheses are proposed:

**H5:** There is a significant positive correlation (relationship) between the trustor’s propensity to trust and the perceived ability of a) the contingent co-worker, b) the permanent co-worker.

**H6:** There is a significant positive correlation (relationship) between the trustor’s propensity to trust and the perceived benevolence of a) the contingent co-worker, b) the permanent co-worker.

**H7:** There is a significant positive correlation (relationship) between the trustor’s propensity to trust and the perceived integrity of a) the contingent co-worker, b) the permanent co-worker.

The next hypothesis (H8) is concerned with the relative importance of trustworthiness factors for predicting trust in the respective co-worker. This hypothesis draws upon arguments and empirical evidence from the cross-cultural trust literature.

As noted in the section reviewing the literature on cross-cultural trust, Doney et al. (1998) proposed that individuals in collectivist cultures (when compared to those in individualist cultures) are more likely to develop trust in a trustee based on the perceived benevolence of this trustee. Empirical findings of research conducted within collectivist cultural contexts support this proposition, for example, Wasti et al. (2011) found that benevolence was the most important trustworthiness factor for the prediction

of peer trust within a Turkish sample of employees. Mizrachi et al. (2007) found that Jordanian managers based their trust decisions on the motives and intentions of the trustee more than on the competence of the trustee.

Having argued for the salience of benevolence to the prediction of co-worker trust (in general) in the context of Jordanian organisations, some vulnerabilities of contingent employee's towards their permanent co-workers and vice-versa are examined to 1) further support the notion that benevolence will be most significant in predicting co-worker trust in the context of the relationship between permanent and contingent employee co-workers, and 2) clarify further the role played by other trustworthiness factors. According to Knoll and Gill (2011) several researchers have argued that the relative importance of the trustworthiness factors might vary across trust referents, depending on the nature of the vulnerability or dependency in the relationship. When the referents of trust are contingent and permanent employee co-workers, the previous arguments suggest that the relative importance of trustworthiness factors for trust in a permanent employee co-worker may vary from the relative importance of those factors for trust in a contingent employee co-worker. In the case of co-worker relationships in general, Knoll and Gill (2011) argue that the work arrangements in modern workplaces, such as decentralisation and work teams which require increased interaction and task interdependence among peers, have increased an employee's vulnerability to co-workers because such situations require increased cooperation and sharing of sensitive or personal information between peers.

Yet, given that permanent and contingent employees are different types of employees, it can be suggested that each of these two types may have its own specific vulnerabilities towards the other type. The vulnerabilities that a contingent employee exhibits towards a permanent co-worker or other contingent co-workers are reflected in the situations that contingent employees may face in their workplaces. For example, according to Vaiman, Lemmergaard and Azevedo (2011, p.315) "a common statement from the contingent workers is that they lack daily social and professional togetherness". This statement suggests that contingent employees may be vulnerable to other members of the organisation (especially permanent co-workers and other contingent co-workers) because they may rely on them to satisfy their social and belongingness needs. Therefore, the researcher argues that a permanent or contingent co-worker's degree of closeness to and social interaction with the trustor is more likely to be a manifestation of

that co-worker's level of benevolence exhibited towards the trustor than a result of his/her level of ability or integrity. A contingent employee in that situation will be more concerned with the trustee's benevolence and less concerned with the trustee's ability or integrity when forming trust in the co-worker.

Similarly, according to Pane Haden et al. (2011) many temporary workers hope to become permanent workers. The researcher argues that this hope may be based on the contingent employee depending on other members in the organisation (including permanent or other contingent co-workers) to at least not cause any problems or place any obstacles in his/her way of becoming a permanent employee. It makes sense to assume that this behaviour from the co-workers of the contingent employee is more likely to be the result of their benevolence and integrity rather than their ability to perform their work tasks. The contingent employee may be more concerned with benevolence and integrity than with the ability of those co-workers when establishing trust in a permanent or contingent co-worker. Therefore, it is expected that (a permanent or contingent) co-worker's perceived benevolence, followed by perceived integrity, will be more important than perceived ability when the contingent employee is forming trust in that co-worker.

The vulnerabilities of a permanent employee towards a contingent co-worker are also rooted in the situations that a permanent employee may face in the workplace. For example, permanent employees may perceive contingent employees as a threat to their own job security (von Hippel and Kalokerinos, 2012; Noe et al., 2008). This suggests that permanent employees may depend on contingent co-workers to at least not threaten their existence in the organisation. Furthermore, in this type of situation, "although speculative, it seems possible that permanent employees are loath to help their temporary colleagues for fear that enhancing their performance will only increase the likelihood that the temporary employees will replace them" (von Hippel and Kalokerinos, 2012, p.210). This may imply, that when a permanent employee is deciding to trust his/her contingent co-worker, he/she might be particularly concerned with his/her contingent co-worker's abilities, and whether or not these abilities threaten his/her job security. These arguments suggest that the relationship between the perceived ability of the contingent co-worker and trust in the contingent co-worker is an inverse one when these abilities are perceived as a threat. Therefore, high levels of perceived benevolence and integrity are more likely to impact trust formation than a

high level of perceived ability, since it can be reasoned that the permanent employee's job security is mostly threatened by contingent workers' high abilities more than the other two trustworthiness factors.

Based on these theoretical arguments, it is expected that the perceived benevolence of the trustee (whether a permanent co-worker or a contingent co-worker) will be most salient and will have greater relative importance for the trustor (whether permanent or contingent or both) than the relative importance of the other two trustworthiness factors (especially perceived ability) in predicting trust in the co-worker. Thus the following hypothesis is proposed:

**H8:** The perceived benevolence of the respective trustee will explain a greater amount of variance in trust in a) a contingent co-worker or b) a permanent co-worker than that explained by the perceived integrity of the respective trustee and this in turn will explain a greater amount of variance than that explained by the perceived ability of the respective trustee.

As for H9, it is concerned with the relationship between trust levels in different referents. This hypothesis was mainly based on empirical evidence from the trust literature.

As seen in the literature review section on co-worker trust, a number of empirical studies (i.e. Knoll and Gill, 2011; Redman et al., 2011; Tan and Lim, 2009) have found positive and significant relationships among trust levels in different foci (e.g. supervisor, peer, subordinate, organisation). In general, these findings seem to indicate that in most cases trust in one referent is positively related to trust in other organisational referents. Although past research has not examined the relationship between trust in a permanent co-worker and trust in a contingent co-worker, the commonness of detecting positive relationships among trust levels in different foci within the extant literature would suggest that it is also possible that trust in a permanent co-worker is positively related to trust in a contingent co-worker.

A number of mechanisms have been proposed and used in the literature to explain these positive relations between trust in different referents or foci. For example: Knoll and Gill (2011) argue that employees will be more likely to trust other members in the organisation, such as managers or co-workers, when these employees work in

organisations that foster a climate of trust through the provision of supportive and encouraging workplaces. Although its propositions are not tested in this thesis, 'balance theory' was also used by past research (e.g. Lau and Liden, 2008) as a mechanism through which relationships between trust in various foci are established. In the context of the permanent-contingent co-workers relationship, this theory would (for example) suggest that if a permanent employee (the trustor) trusts another permanent co-worker of his/hers, and if this trustor perceived that this permanent co-worker trusts a contingent co-worker, the trustor will also form trust towards that contingent co-worker to maintain balance. Even though it was noted earlier that because this thesis does not examine the impact of third parties on trust in a co-worker, it is not possible to use this theory in this thesis, nonetheless, the fact that one useful notion from this theory, is that employees attempt to achieve balance in their relationships.

Knoll and Gill's (2011) argument implies that trust climate will influence a trustor's level of trust in both familiar and unfamiliar organisational members. For those considered unfamiliar to the trustor, it is safe to assume that they will all be trusted at pretty much the same level. This is because the trust literature (i.e. Mayer et al., 1995) attributed differential trust levels to differences in the perceived trustworthiness of trustees. In addition, given that being unfamiliar with these referents implies that the trustor does not have much information about each referent's trustworthiness, it is safe to assume that the levels of trust in these referents will be pretty much the same. However, for those closely known by the trustor, Mayer et al. (1995) proposes that trust levels in these familiar referents may vary because of differences in their perceived trustworthiness.

Given that this study examines trust levels in co-workers (i.e. permanent/contingent) that the trustor closely works with and thus is expected to be familiar with, it is difficult to expect with certainty that the two co-workers are going to be trusted at the same level, however, this possibility cannot be ruled out because it is also possible that the two co-workers are perceived to have similar or close levels of trustworthiness. Furthermore, the previous research noted earlier (e.g. Knoll and Gill's, 2011) also examined trust in referents that the trustor is familiar with (i.e. manager, peer) and found positive relationships between trust levels in these referents. Thus, in this study it is expected that trust in a permanent and trust in a contingent co-worker will also be positively related.

Finally, even though it was noted earlier that tensions between permanent and contingent employees is one of the possible disadvantages that can occur when using a blended workforce, nonetheless this does not prevent the permanent employee from developing trust in a contingent co-worker and vice-versa and thus, does not prevent an employee from simultaneously trusting both a permanent and contingent co-worker for two reasons: first, as stated in the introduction section, these tensions are a possibility not a certainty, thus, they may or may not occur. Second, even if these tensions occur between permanent and contingent co-workers, this does not necessarily prevent the development of trust between the two parties because as noted in an earlier section, Schoorman et al. (2007) have argued that trust and distrust can co-exist within the same relationship because trust is domain specific. This suggests that a trustor (e.g. a permanent employee) can trust a trustee (e.g. contingent employee) in a certain domain and not trust him/her in another domain both at the same time. Furthermore, as noted earlier, this argument by Schoorman et al. (2007) was empirically supported to a considerable degree by the findings of Saunders et al. (2014).

Based on these arguments and the empirical evidence which suggest that in most cases trust in one organisational referent is likely to be positively related to trust in another organisational referent, the following hypothesis is proposed.

**H9:** There is a significant positive correlation (relationship) between trust in a permanent co-worker and trust in a contingent co-worker.

The next set of hypotheses is concerned with the behavioural outcomes of trust and draws upon the principles of social exchange theory.

The principles of social exchange theory noted earlier suggest that when the perceived risk in a social exchange relationship is high (because trust in the exchange partner is low), the trustor will be more likely to act in a self-concerned and self-interested way (e.g. show antisocial work behaviours) and is less likely to act in a way that shows concern for others (e.g. interpersonal citizenship behaviours or ICB). On the other hand, when the perceived risk in the relationship is reduced (because trust in the exchange partner is high), the trustor will be more likely to act in ways that show concern towards the exchange partner (e.g. interpersonal citizenship behaviours) in order to maintain the exchange relationship and will be less likely to perform any antisocial work behaviours that would harm the exchange relationship. In the case of social exchanges between a



permanent and a contingent employee, these arguments derived from social exchange theory would suggest that if (for example) the permanent employee performed citizenship behaviours towards the contingent employee, these behaviours will be based on the belief that the contingent employee will reciprocate such behaviours, and this belief that reciprocation would occur is in turn based on the permanent employee trusting the contingent co-worker, hence, making the perceived risk of the contingent co-worker not reciprocating low.

Another depiction of how social exchange theory might explain the impact of trust on its outcomes is offered by Dirks and Ferrin (2002) who argue that drawing on principles of social exchange theory (or the mechanism by which trust might affect performance and behaviour termed by these authors as the ‘relationship-based perspective’), “individuals who feel that their leader has, or will, demonstrate care and consideration will reciprocate this sentiment in the form of desired behaviors.” (p.613). Hence, applying this same logic to the context of permanent and contingent co-worker relationships suggests that if (for instance) a permanent employee felt that the contingent co-worker is demonstrating (for example) benevolence and consideration towards him/her, the permanent employee will try to reciprocate this emotion by performing desired behaviours towards the contingent co-worker, such as by showing interpersonal citizenship behaviours. It would be illogical to perform any antisocial work behaviours towards the contingent co-worker, since it can be safely assumed that they will be undesired by this co-worker.

Another mechanism through which trust might impact its behavioural outcomes is also offered by Dirks and Ferrin (2002) who term the mechanism the ‘character-based perspective’ and explain that it is based on the propositions of the Mayer et al.’s (1995) integrative model of organisational trust. Drawing on this perspective Mayer and Gavin (2005, p.875) argue that “a lack of trust can be expected to divert an employee’s attention from activities that contribute to his or her organization.”. Stated differently, “employees who are unwilling to be vulnerable to management are less able to contribute to their organization because of the time and energy devoted to self-preserving activities.” (Mayer and Gavin, 2005, p.876). Given that the lack of trust in a trustee is the result of low levels of perceived ability, benevolence, and integrity (Mayer et al., 1995), these arguments suggest that if an employee views the trustee as lacking in any or all of the trustworthiness factors, he/she will be unwilling to be vulnerable to the

trustee and will divert his/her time and energy from activities that benefit his/her organisation or members within the organisation (e.g. ICB's and performance), and instead devote these resources to self-protecting activities (e.g. antisocial work behaviours). These arguments support and are in line with the previously cited arguments of Thau et al. (2007) that when risk in a social exchange relationship is high (because trust in the exchange partner is low), the individual will tend to act in ways that reflect self-interest more than in ways that reflect concern for the exchange partner.

Empirical findings and evidence further support the theoretical arguments linking trust to each of its behavioural outcomes. First, concerning the relationship between trust and antisocial work behaviours, as noted in the literature review section, empirical studies (i.e. Abdul Rahim and Nasurdin, 2008; Thau et al., 2007) and meta-analysis (i.e. Colquitt et al., 2007) found a negative and significant relationship between trust in different foci and antisocial, deviant and counterproductive behaviours. However, Pane Haden et al.'s (2011) study found this relationship to be negative yet not significant.

Similarly, as noted in the literature review, a number of meta-analyses (i.e. Colquitt et al., 2007; Dirks and Ferrin, 2002) found a positive relationship between trust in different foci and different types of citizenship behaviours. Moreover, Yang et al. (2009) found that affective trust in supervisor mediated the relationship between supervisory procedural justice and co-worker helping behaviour. Brower et al. (2009) found that trust in manager was positively related to a subordinate's organisational citizenship behaviours.

In relation to trust in co-worker, McAllister (1995, p.31-32) argues that "individuals expressing high affect-based trust in peers may also direct a great amount of interpersonal citizenship behaviour toward them. Increased assistance may follow naturally either from an increased awareness of peer needs (the product of need-based monitoring) or from a desire to assist peers in meeting their personal objectives and to express felt care and concern tangibly." A number of studies (i.e. Redman et al., 2011; McAllister, 1995) found that co-worker trust is positively associated with ICB or altruism towards individuals.

In line with the theoretical arguments and empirical findings presented, it is expected that when an employee (permanent or contingent) has social exchanges that are high in trust with his/her co-worker (permanent or contingent), this trust will reduce the risk

and uncertainty inherent in the relationship between the two parties, and consequently, the trustor will be motivated to engage in behaviours that show concern for others (e.g. interpersonal citizenship behaviours in the form of person-focused ICB and task-focused ICB) and refrain from engaging in behaviours that show self-concern such as antisocial work behaviours. Thus the following hypotheses are proposed.

**H10:** There is a significant negative correlation (relationship) between trust in the respective co-worker and antisocial work behaviours towards (a) the contingent co-worker, (b) the permanent co-worker

**H11:** There is a significant positive correlation between trust in the respective co-worker and *person*-focused ICB towards (a) the contingent co-worker, (b) the permanent co-worker.

**H12:** There is a significant positive correlation between trust in the respective co-worker and *task*-focused ICB towards (a) the contingent co-worker, (b) the permanent co-worker.

Furthermore, given that two dimensions constituting ‘interpersonal citizenship behaviours’ are examined in relation to trust in a co-worker and within the context of relationships between permanent and contingent co-workers, a hypothesis was also developed that relate to whether there are differences in the impact trust has on each of these two forms of ICB.

Settoon and Mossholder (2002) argue that relationship quality variables (including co-worker support, trust, perspective taking and empathic concern) will be associated with person-focused ICB, whereas relationship context antecedents (including network centrality and initiated task interdependence) will be related to task-focused ICB. They found that all relationship quality variables were significantly correlated with person focused ICB and that trust was indirectly related to person-focused ICB through empathic concern. They also found that relationship quality variables were related to task-focused ICB (either directly or indirectly) and a relationship context variable (network centrality) was also related to person-focused ICB. And even though Settoon and Mossholder (2002, p.262) have stated that they “have modelled relational quality and relational context variables as having effects specific to each form of ICB”, the results they found show that trust (a relationship quality variable) was associated with

both forms of ICB (person-focused ICB and task-focused ICB), with the association with person-focused ICB being stronger. Based on this, it is expected that trust in a co-worker (whether permanent or contingent) will be more strongly related to person-focused ICB than to task-focused ICB towards a co-worker (permanent or contingent). Hence the following hypothesis is proposed:

**H13:** Trust in the respective co-worker will be more strongly related to *person*-focused ICB than to *task*-focused ICB towards (a) the contingent co-worker, (b) the permanent co-worker.

The final set of hypotheses is concerned with exploring whether or not employees (permanent and contingent) differentiate between their permanent and contingent co-workers, thus these hypotheses test whether or not there are differences in the levels of perceived trustworthiness, trust, antisocial work behaviours and interpersonal citizenship behaviours directed towards each the permanent and contingent co-worker. these hypotheses draw upon the principles of social-identity theory, social exchange theory and various literatures and theories to generate arguments as to why employment status is a valid categorisation variable for permanent and contingent employees developing in-group and out-group perceptions and second why it is expected that employees will differentiate between their permanent and contingent co-workers.

As will be noted in the following paragraphs, Hepburn (2003) notes that there a number of categorisation variables used by individuals to form their in-group and out-group perceptions. Thus, these variables may overlap in explaining why employees differentiate between in-group and out-group members, however, as discussed in the limitations section in chapter eight, the focus on only employment status as an explanatory factor was brought about because this thesis is basically interested in examining relational contexts involving permanent and contingent co-workers and thus there was also interest in seeing whether differences in employment status can cause employees to differentiate between their co-workers. Furthermore, examining the effects of these other explanatory variables is beyond the scope of this thesis and thus, can be carried out by future researchers.

There are a number of theoretical arguments and empirical evidence in previous research suggesting that employment statuses (permanent or contingent) are relevant and observable characteristics to the workforce and thus are used as basis for

categorisation processes that result in in-group and out-group perceptions. These are discussed next.

To evaluate the relevance of employment status as a categorisation variable that determines in-group and out-group perceptions, the determinants of categorization proposed in self-categorisation theory (Turner, 1991) are examined in relation to permanent and contingent employees. Hepburn (2003) notes that self-categorization is context-dependent since there are always a number of possible categorizations available for the individual and the categorization that is actually used depends on the 'meta-contrast ratio'. According to Turner (1991, p.156) "categories form in such a way as to ensure that the differences between categories are larger than the differences within categories. The *meta-contrast ratio* – the average perceived inter-category difference over the average perceived intra-category difference - provides a simple quantitative measure of the degree to which any collection of stimuli within a given frame of reference will tend to be categorized as a perceptual unit (or, in the case of people, of the degree to which a collection of individuals will be perceived as a social group)".

Broschak and Davis-Blake (2006) argue that temporary and part time work arrangements are salient and visible to workers as differences in age, ethnicity and other characteristics because compared to standard employees, temporary and part-time employees work fewer hours per week and thus, their exists from the organisation and absences stand out, the work assignments they receive are less complex, less interdependent and less interesting, some organisations assign them distinctive markers making them distinguishable, and finally, organisations create organisational policies that clearly differentiate between temporary employees and their standard co-workers.

These differences that are created by organisational policies between permanent and contingent employees are well established in the literature. Gilder (2003) notes that one of the differences between core employees and contingent workers is that contingent workers are aware that their relationship with their employer and colleagues will end at a time they usually know when they start the job. Another difference is that "contingent workers receive fewer tangible and intangible benefits from their employing organizations than do regular employees" (Van Dyne and Ang, 1998, p.694). Allan and Sienko (1997) note that contingent employees are hired on a temporary, contractual or part-time basis for a period of time ranging from a few days to years, this is in contrast

to permanent employees who enjoy privileges not available to contingent employees. Following the same logic of Broschak and Davis-Blake (2006) in their argument earlier, it can be argued that these differences in privileges between permanent and contingent employees can also be easily observed by workers in the workplace and thus, make each employment status group salient and visible to the other. An employee's awareness of these differences in privileges (and even job statuses) is supported by the propositions of equity theory (Adams, 1963). According to Adams (1963) an employee compares his/her inputs (e.g. his/her contribution to the exchange relationship) and outcomes (e.g. pay, intrinsic rewards, seniority benefits, fringe benefits, job status and status symbols) to those relating to co-worker(s) to establish whether or not there is inequity in the exchange with the employer.

The propositions of social exchange theory explain how the organisation's policies create these differences and thus contribute to the development of in-group and out-group perceptions within the organisation. For example, according to Stamper and Masterson (2002) an organisation can create and promote the distinction between insider (e.g. full-time, standard employees) and outsider (e.g. part-time, non-standard) employees by offering benefits, training and promotions to certain employees (e.g. full-time employees) while not offering these inducements to the other employees (e.g. part-time employees), thus, sending signals to the first group that they have achieved insider status and sending signals to the other group that they are outsiders.

Empirical evidence supports this since Stamper and Masterson (2002) found that employees with high levels of 'perceived organisational support' experience higher levels of 'perceived insider status' which is defined as "the extent to which an individual employee perceives him or herself as an insider within a particular organization." (p.876). Stamper and Masterson (2002) argue that 'perceived organisational support' may be the best for representing Blau's (1964) social exchange framework.

In relation to differences in terms of their perception, attitudes and behaviours within an organisational context, empirical evidence (even though inconsistent in its findings) from the literature examining differences between permanent and contingent employees provides considerable support to the proposition that there are differences between the two job status groups. For example; some studies in this literature found no differences

between the two work status groups in terms of some of their attitudes and behaviours. Pane Haden et al. (2011) examined the potential differences between permanent and temporary employees with respect to workplace deviance tendencies, organisational commitment, organisational trust, and perceived organisational fairness and found temporary employees reported similar levels of workplace deviance, commitment to the organisation, trust in the organisation and perceptions of fairness about the organisation, which suggests that these variables are individual characteristics of the worker and may not be affected by employment status.

However, the findings of some other studies in this literature (e.g. Biggs and Swailes, 2006; Gilder, 2003; McDonald and Makin, 2000) supports the notion that different employment statuses leads to differences between the two types of employees in terms of 'some' of their perceptions, attitudes and behaviours within an organisational context. For example; Van Dyne and Ang (1998) they found that contingent workers had lower levels of organizational citizenship behaviours and affective commitment than those of regular employees. McDonald and Makin (2000) found that non-permanent staff had significantly lower levels of continuance commitment and significantly higher levels of affective and normative commitment than those of permanent staff. Gilder (2003) investigated differences in trust toward employer, commitment and justice perceptions between contingent and core employees in two hotels and the impact of these attitudes on work behaviours and found no differences in trust and procedural justice in the two groups of employees, yet, Gilder also found that contingent workers showed lower commitment to the team and to the organisation and display less favourable work related behaviours than core employees. Gilder (2003) found that while trust in employer and procedural justice were equal for both permanent and contingent employees, contingent workers showed less commitment to the organisation and team, less positive behaviours and more negative behaviours towards the organisation than core employees do. Biggs and Swailes (2006) found that agency call centre workers had lower levels of organisational commitment than permanent workers when controlling for the relation between agency and permanent workers.

In relation to these inconsistent findings, Guest (2004) notes that it is unwise to assume that there are no differences between permanent and contingent employees in terms of behaviours and attitudes.

Thus, this empirical evidence provides some support to the notion that differences between permanent and contingent employees are larger than differences within each employment status category. Furthermore, it can be argued that these differences in attitudes and behaviours can also be observed by the workforce, thus reinforcing perceptions of similarities within each employment status group and differences between the two status groups.

Moreover, a number of studies have been conducted based on the assumption that employment status is a visible and salient characteristic to the organisation's workforce and the empirical evidence they provided also supports the argument that permanent employees view contingent employees as a distinct visible group (outgroup) and vice-versa. For example, Geary (1992) found that permanent employees saw temporary employees as saucy and cheeky, while temporary employees often felt that permanent employees abused them. Using in-depth interviews, Rogers (1995) found that temporary workers were socially isolated and alienated from others in the organisation. In her case study, Smith (1994) found that there were hidden hierarchies between the two groups and that permanent employees viewed temporary co-workers as having little reason to care about their work and were not concerned about whether their work meets standards. Kraimer et al. (2005) found that the perceived job security of full-time employees was negatively related to their perceptions that temporary workers are a threat. von Hippel and Kalokerinos (2012) found that the organisation's layoff policy and motives in addition to the relative rank of the temporary employees contributed to permanent employees perceiving these temporary co-workers as a threat.

All these arguments and empirical evidence suggest that there are observable and salient differences (to the workforce) between permanent and contingent employees and that there is evidence that permanent employees view contingent employees as a visible and distinct group and vice-versa. According to Chattopadhyay and George (2001, p.782) research on employment externalization shows that the distinction between permanent and temporary employees is salient to the workforce "therefore, employees may categorize themselves and others into in-groups and out-groups along this dimension".

Furthermore, the empirical evidence (i.e. Geary, 1992; Smith, 1994, Chattopadhyay and George, 2001; Broschak and Davis-Blake, 2006) noted in the introduction of this chapter and which found and reported instances of tensions, animosities, conflicts, lack



of trust and bad relations between permanent and contingent employees supports the notion that employment status is a relevant categorisation variable used to form in-group and out-group perceptions. This is because, these negative instances correspond to the predictions of social identity theory noted earlier in relation to how in-group members may treat out-group members.

Another indication for the salience of self-categorization done by permanent and contingent employees is what Turner (1991) termed 'normative fit' and referred to as the social meaning of the differences and similarities between categories (category content) and the relationship of these categories to the values, goals and needs of the perceiver (the 'relative accessibility' of the category). Thus, within a blended workforce context, 'category content' relates to what it means to be a permanent employee or a contingent employee. This meaning is well documented in and can be derived from the definitions (noted in the introduction) of permanent and contingent employees presented in the literature.

Within an organisational context, the categorisation of employees according to their job status already exists (e.g. permanent or contingent employees) and thus, the nature of the relationship that these employees' have with the organisation (in terms of employment contract) forces them to think in terms of this categorisation and in terms of belonging to one of these categories. However, as implied earlier, 'category content' has to have a relationship with 'relative accessibility' of the category. That is, in order for normative fit to lead to self-categorization as either a permanent or contingent worker, the meaning of being a permanent or contingent employee should be compatible with the employee's goals and needs. Within a blended workforce, empirical evidence support the fact that permanent employees want what it means to be a permanent employee (e.g. security of employment) as implied in the definition of permanent employees. For example, De Cuyper and De Witte (2007) found permanent employees had higher expectations about job security than temporary employees. As for contingent employees, Pane Haden et al. (2011, p.146) state that "many individuals accept temporary position in the hopes that the job will eventually become permanent". While this statement implies that not all contingent employees hope to become permanent employees, nonetheless, for the ones who do, it also implies that temporary workers understand that in order to become permanent members of the organisation they first need to hold temporary positions. Furthermore, Hipple (2001) notes that

contingent work has become more of a voluntary choice and some individuals actually prefer a contingent job due to personal reasons such as attending school, training and family or personal obligations or because of the flexibility of the arrangement. Thus, these two categories are 'relatively accessible' to their members.

Furthermore, the work of David Guest also offers insight into the psychological contracts of contingent employees which supports the notion of relative accessibility. For example, Guest (2004) reviewed the literature on the relationship between employment contracts and psychological contracts and concluded that this empirical evidence suggests that the state of the psychological contract for contingent employees is equally or more positive than that reported by permanent employees. The state of the psychological contract refers to "the extent to which promises are kept, how fair they are perceived to be and trust in whether they are likely to be delivered in the future." (Guest, 2004, p.6). This finding may suggest that contingent employees are satisfied with being contingent employees. Furthermore, in another study that used a sample of 642 UK workers from 19 organisations, Guest and Clinton (2006) found that compared to their permanent co-workers, temporary workers reported more positive attitudes towards the work and more positive states of the psychological contract. However, they also found that a majority of these contingent workers would prefer a permanent job yet this did not majorly impact their positive attitudes. Finally, Guest, Oakley, Clinton and Budjanovcanin (2006) found that the reported experiences and attitudes of employees on un-standard contracts were at least as positive as those reported by employees on traditional contracts. Again, all these findings may suggest that contingent work is compatible with contingent employees' needs. However, these findings do not indicate if these positive attitudes are stronger towards permanent or contingent co-workers.

To sum up, given that these empirical and theoretical arguments both suggest that permanent and contingent employees do in fact use employment status to form their in-group and out-group perceptions it is expected that for permanent employees, the in-group is more likely to be other permanent co-workers while for contingent employees, the in-group is more likely to be other contingent co-workers.

Therefore, based on the predictions of social-identity/self-categorising theories and in relation to ICBs, it is expected that in-group bias will be one consequence of an employee strongly identifying with and categorizing him/herself with other employees

who share similarities with him/her. Thus, this favouritism or 'in-group bias' towards in-group members may manifest itself in the permanent employee performing higher levels of person and task-focused ICB towards those in-group members (in this example permanent co-workers) compared to levels of ICB's directed towards the out-group members (in this example contingent co-workers).

In relation to antisocial work behaviours it can be expected that an employee will be more likely to perform antisocial work behaviours towards an out-group member than towards an in-group member. For example, a permanent employee will more likely exhibit higher levels of antisocial work behaviours towards his/her contingent co-worker (out-group member) than towards a permanent co-worker (an in-group member).

Finally, in relation to trustworthiness and trust, 'in-group bias' may also be manifest in the levels of perceived trustworthiness and trust exhibited towards in-group and out-group members. The predictions of social identity theory and self-categorization theory have been used by previous researchers to predict the level of perceived trustworthiness held for an in-group member and that held for an out-group member. For example, organisational research examining the antecedents of interpersonal trustworthiness has, according to Elsbach (2004), focused on two sets of factors or antecedents: behavioural and cognitive factors. Cognitive factors, explain how the perceptions of trustworthiness are established and include the cognitive processes of social categorization and comparison (Elsbach, 2004). According to McKnight et al. (1998) one of the categorization processes a person may use to develop trusting beliefs (which encompass benevolence, competence, honesty and predictability beliefs) is unit grouping, which refers to placing the other person in the same category as oneself.

According to McKnight et al. (1998, p.480) "one group member will be more likely to form trusting beliefs toward another group member". Furthermore, "across experimental and field studies of the content of intergroup perceptions, the dimensions on which evaluative bias in favour of in-groups occurs most reliably are those associated with trustworthiness, honesty, or loyalty." (Brewer, 1979, p.321). These arguments suggest that individuals usually favour their in-group members (at the expense of out-group members) in terms of perceptions of trustworthiness, honesty and loyalty. Based on these arguments and on the predictions of social identity theory and self-categorization

theory, it is expected that the unit grouping process performed by an employee will lead this employee to form trusting beliefs towards an in-group member that are more positive than the trusting beliefs the employee forms towards an out-group member. That is, the individual will favour his in-group member in terms of trustworthiness perceptions.

And since it has been argued (at the beginning of this section) that the higher the level of perceived trustworthiness of a trustee, the higher the level of trust in that trustee (as proposed by the Mayer et al.'s trust model), it is anticipated that for example, when a permanent employee (the trustor) perceives the trustworthiness of another permanent co-worker more positively than the trustworthiness of a contingent co-worker, that permanent employee will have a higher level of trust in his/her permanent co-worker than that towards his/her contingent co-worker, and this same logic applies to when the trustor is a contingent employee. This expectation is also supported by the predictions of social identity theory and self-categorization theory that the individual will also favour his in-group member in terms of trusting the in-group member more than the out-group member. Furthermore, Huff and Kelley (2003) argue that collectivist cultures encourage individuals to trust in-group members more than out-group members.

The notions of social exchange theory may also offer insights to explain why employees may differentiate between their permanent and contingent co-workers. According to Van Dyne and Ang (1998) contingent employees have shorter and more bounded interactions within the organisation than permanent employees do. In terms of social exchange theory, this may suggest that in general, for permanent employees, social exchanges with their permanent co-workers are longer and more unrestricted (due to the long time they spend in the organisation) than those with their contingent co-workers (which are possibly affected by the contingent workers short and bounded interactions), while contingent employee's social exchanges with their co-workers are shorter. However, for contingent employees, it is difficult to determine which co-worker group (i.e. permanent or contingent) they have longer interactions with given the variety of contingent work arrangements (of the contingent employee sample in this study) and what these arrangements entail in terms of interactions with other organisational members. These arrangements may offer contingent employees the opportunity to either: interact more with permanent co-workers, interact more with contingent co-workers or pretty much equally interact with both types. Thus, it is difficult to

generate expectations and arguments based on contingent employees' length of interactions with organisational members. Alternatively, this thesis will use data from a contingent employee sample to empirically explore whether or not contingent employees differentiate between their permanent and contingent co-workers.

Based on the notions of social exchange theory noted earlier on exchanging favours and on how trustworthiness and trust emerge in social exchanges and in relation to ICBs, it is expected that because the interactions/social-exchanges of permanent employees with their permanent counterparts are longer and more free than those with contingent co-workers, the frequency of exchanged favours (e.g. ICB's) between permanent employees and permanent co-workers will be higher than that between permanent employees and contingent co-workers.

Furthermore, given this higher frequency of social exchanges among permanent employees than that of exchanges between permanent employees and contingent co-workers, social exchange theory predicts that for permanent employees, trust will emerge more strongly in work relationships with permanent co-workers than in those with contingent co-workers and trustworthiness evidence will be gathered more in relationships with permanent co-workers than in relationships with contingent co-workers.

Finally, given that for permanent employees, trust is expected to be higher in work relationships with permanent co-workers than in relationships with contingent co-workers, the notions of social exchange theory noted earlier predict that antisocial work behaviours will be lesser in frequency in relationships among permanent employees compared to their frequency in relationships between permanent employees and their contingent co-workers. Therefore, the following hypotheses are proposed:

**H14a:** There will be a statistically significant difference between *person*-focused ICB towards an in-group member and that towards an out-group member, with *person*-focused ICB towards the in-group member being higher than that towards the out-group member.

**H14b:** There will be a statistically significant difference between *task*-focused ICB towards an in-group member and that towards an out-group member, with *task*-focused

ICB towards the in-group member being higher than that towards the out-group member.

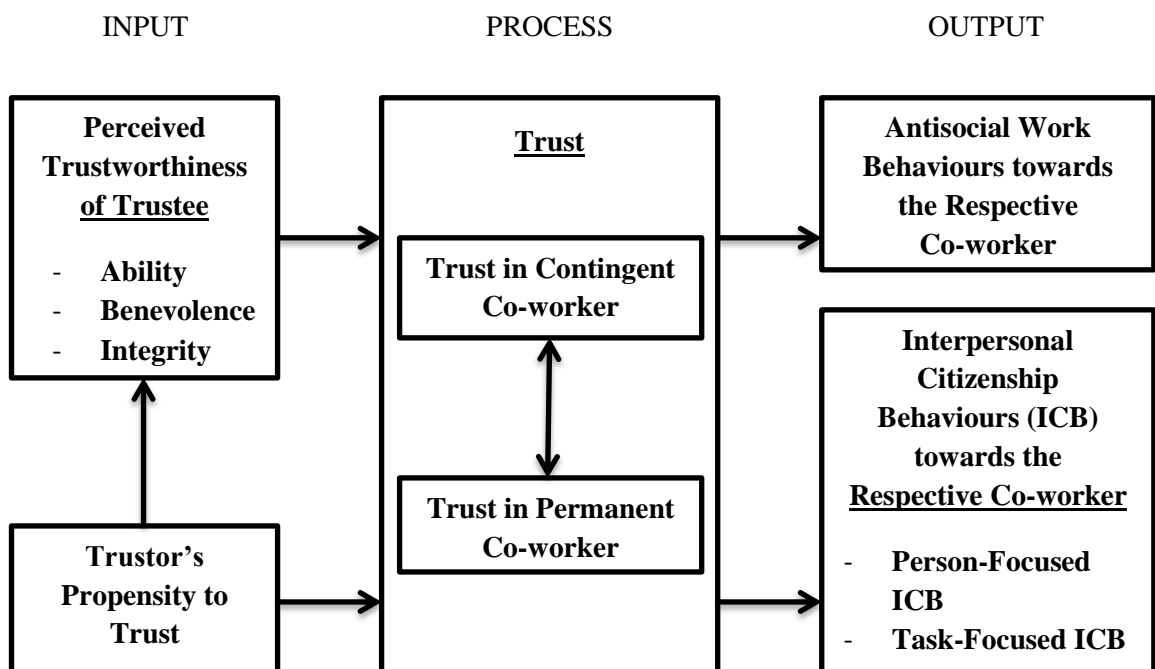
**H14c:** There will be a statistically significant difference between antisocial work behaviours towards an in-group member and that towards an out-group member, with antisocial work behaviours towards the in-group member being lower than that towards the out-group member.

**H15:** There will be a statistically significant difference between the perceived trustworthiness of an in-group member and that of an out-group member, with the perceived trustworthiness of the in-group member being higher than that of the out-group member.

**H16:** There will be a significant difference between trust in an in-group member and trust in an out-group member, with trust in the in-group member being higher than that in the out-group member.

### 1.3.3 Conceptual Model

Figure 1.6: Conceptual model



## **1.4 Research Philosophical Position**

The philosophical position underpinning and shaping the investigation presented in this thesis is an intermediate one in terms of ontology (subjectivism vs objectivism), epistemology (positivism vs interpretivism) and axiology. Holden and Lynch, (2004) describe what this intermediate position implies starting with what it implies in terms of ontology by stating that:

“An intermediate position implies that reality is tangible yet humans have an input into forming its concreteness. The corresponding epistemological stance is that knowledge although not absolute, can be accumulated, tested, and either retained or discarded.” (Holden and Lynch, 2004, p.406-407)

As for what it implies in terms of human nature they state that:

“An intermediate stance views human nature as both deterministic and voluntaristic, that is, humans are born into an already structured society, yet societal structures evolve and change through human interaction.” (Holden and Lynch, 2004, p.407)

The adoption of such an intermediate philosophical position makes it possible to examine co-worker trust utilising the two extreme ends (or approximations of them) of each of the philosophical positions pertaining to ontology, epistemology and axiology. That is, the first study reported in this thesis which is concerned with the first two research questions adopts philosophical positions that are close to the subjectivist and interpretivism viewpoints of ontology and epistemology respectively. While the second study dealing with the remaining research questions adopts positions close to the objectivism and positivism viewpoints of ontology and epistemology respectively. Based on these philosophical assumptions underlying the investigation carried out within each of the two studies, appropriate research methods were adopted. The first study utilised inductive and qualitative methods to examine co-worker trust while the second study which took a step further by considering the employment status of the co-worker utilised deductive and quantitative methods. These qualitative and quantitative research approaches are briefly introduced in the next section and are discussed in more detail within the methods chapter corresponding to the study in which each research approach was applied.

The adoption of an intermediate position in this thesis is based on the view that “(m)ost business research has been from a more moderate objective position.” (Holden and Lynch, 2004, p.402). Taking the investigation of organisational culture as an example, Saunders, Lewis and Thornhill (2009) note that theory and practice within the management field has leaned towards treating organisational culture as a variable and as something that the organisation has and can manipulate and change to the state desired by management. In terms of the study of interpersonal trust within organisation, this tendency towards adopting a more objectivist position is clear from the considerable number of studies (e.g. Knoll and Gill, 2011; Yakovleva et al., 2010; Tan and Lim, 2009; Gill et al., 2005; Settoon and Mossholder, 2002; McAllister, 1995) that used deductive approaches and corresponding quantitative methods to examine trust within the organisation. However, also taken into consideration in this thesis was the call for the adoption of more subjectivist and interpretivism philosophical positions to guide the examination of trust within organisations which is implied by some organisational researchers (e.g. Lewicki et al., 2006) who encouraged the examination of trust using qualitative methods.

Another factor was the exploratory, descriptive and explanatory purposes underpinning the research questions raised in this thesis which led to the adoption of a pragmatist position. Pragmatism argues that the research question is the most important determinant of the philosophical position adopted in terms of ontology, epistemology and axiology (Saunders et al., 2009). Thus, for research questions with exploratory purposes, subjectivist and interpretivism positions were adopted. As for research questions with explanatory purposes, objectivism and positivism positions were adopted.

## **1.5 Methodology**

In order to meet the aims of this research and address the research questions raised by this thesis, both qualitative and quantitative approaches were adopted. To address the first two research questions pertaining to the exploration of the nature of trust and the identification of the antecedents of trust and distrust in the context of co-worker relationships within Jordanian organisations, semi-structured interviews were conducted with a group of Jordanian employees from different organisations in Jordan. A number



of hypotheses were developed in relation to the remaining research questions concerned with examining the antecedents and outcomes of trust in the context of permanent and contingent co-worker relationships. These hypotheses were tested through the collection of questionnaire data from 200 Jordanian employees (both permanent and contingent) from five different organisations operating in Jordan. The use of mixed approaches to address research questions concerned with examining trust in the context of co-worker relationships (either in general or in the specific context of permanent and contingent co-worker relationships) helped in addressing some of the limitations of using a single approach to examine trust.

Both the qualitative and quantitative data collection instruments were pilot tested before commencing the data collection process. Content analysis was used to analyse data collected using semi-structured interviews and a number of statistical analysis techniques including hierarchical regression analysis, relative weights analysis and paired sample T-test have been used to test the hypotheses developed for this thesis.

## **1.6 Outline of the Thesis**

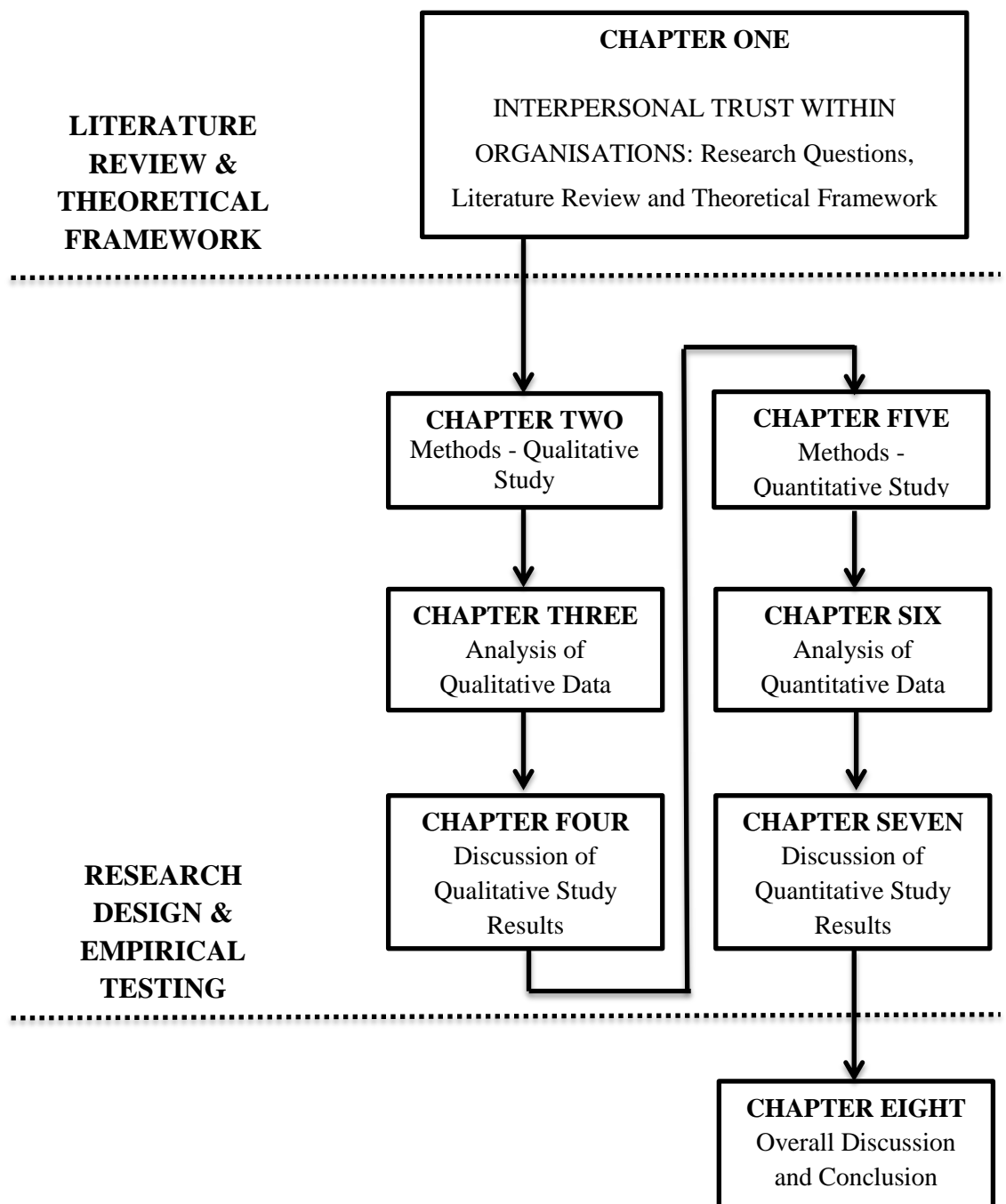
This thesis consists of eight chapters. Subsequent chapters set out in detail the process through which the research was carried out. Figure 1.5 outlines the structure adopted for this thesis; the figure is accompanied by a brief description of the content of each chapter.

*Chapter Two* focuses on the methodology and methods adopted to address the first two research questions raised by this thesis. Justification for the use of qualitative methods for data collection is provided. Then a detailed description and discussion of methods is provided including a description of the recruitment of participants (sampling), translation and pilot testing of interview questions, the conduct of interviews and the procedure followed to analyse the data collected. The chapter ends with a discussion of issues of data quality. Throughout this chapter a number of ethical issues are addressed.

*Chapter Three* presents the findings produced from the analysis of data obtained from semi-structured interviews. This is followed by *Chapter Four* which provides a discussion of these findings in relation to the literature pertaining to the nature of trust

and the antecedents of trust. This is followed by a discussion on the limitations and future research directions for this qualitative study.

Figure 1.5: Thesis outline



*Chapter Five* focuses on the methodology and methods adopted to address the remaining research questions raised by this thesis. Similar to chapter two, this chapter

starts by providing justifications for the use of quantitative methods for data collection. Then a detailed description of methods is provided including a description of the participants and their recruitment (sampling); translation, pilot testing and administration of the questionnaire, response rates and sample characteristics and finally, measures. Similar to chapter three, throughout this chapter a number of ethical issues are addressed.

*Chapter Six* presents the findings of the quantitative study reported in this thesis. The chapter commences with presenting the results of the preliminary analysis of the data collected. Then, the results of reliability tests and correlation analysis are reported. This is followed by a description of the results obtained from hierarchical multiple regression analysis, relative weights analysis and paired sample t-test analysis.

*Chapter Seven* provides a discussion of the results obtained from the analysis of questionnaire data where findings pertaining to each hypothesis or group of hypotheses are discussed separately.

*Chapter Eight* concludes this thesis. The main conclusions of the thesis are summarised, the contributions made to the trust literature are highlighted, the managerial and practical implications of the findings are discussed and the limitations of the quantitative study are listed along with recommendations for future research.

## **1.7 Summary**

Summing up, the work presented in this thesis so far has highlighted the importance of trust for organisations and work relationships, identified a number of research problems within the area of interpersonal trust in organisations and as a result developed hypotheses to address some of these research problems by drawing on an extensive literature pertaining to trust, culture, and the theories of social exchange, social identity and self-categorisation. The hypotheses result in a conceptual model designed to address research questions that aim to examine the antecedents and outcomes of trust in the specific context of permanent and contingent co-worker relationships within Jordanian organisations. The empirical testing of these hypotheses is addressed in chapters five, six and seven of the thesis.

However there are key prior questions that need to be addressed before any such empirical testing can be attempted. These are concerned with how trust is conceptualised and developed within the collectivist context in which Jordanian organisations operate and whether the Mayer et al. (1995) model of trust is applicable in such a setting. These research questions are addressed in the next three chapters which provide a description of the methodology and methods used (chapter two), results (chapter three) and discussion of results (chapter four).

## **CHAPTER TWO**

### **Methods – Qualitative Study**

#### **2.1 Research Approach**

A qualitative research approach was adopted in order to address the following research questions: 1- How do employees working in the context of Jordanian organisations define interpersonal trust in comparison with existing operationalizations of trust?, and 2- What are the antecedents of co-worker trust and distrust and their manifestations in Jordan in comparison with existing frameworks of trust?. Semi-structured interviews were chosen as the data collection method due to the exploratory and explanatory nature of the research question. Saunders et al. (2009) advise that semi-structured interviews tend to be used for both exploratory and explanatory research purposes, whereas structured interviews are used to address descriptive and explanatory research purposes. Saunders et al. (2009) also state that semi-structured interviews provide the researcher with the opportunity to probe answers and to ask interviewees to explain, or build on, their responses. The use of semi-structured interviews by past researchers (e.g. Wasti et al., 2011) to address research questions similar to those of this study is another justification for their use here. Finally, Lewicki et al. (2006) encouraged researchers to use qualitative methods (e.g. interviews and critical incident techniques) to assess the dynamics and development of trust.

#### **2.2 Participants and Procedure**

This section provides a description of the following: the recruitment of participants, the translation and pilot testing of interview questions, how the interviews were carried out, sample characteristics and lastly the procedure followed to analyse the interviews.

##### **2.2.1 Recruitment of Participants**

Since the purpose of this qualitative study was to identify the antecedents of co-worker trust and distrust in the context of Jordanian organisations and compare it to existing frameworks of trust, namely the Mayer et al. (1995) integrative model of organisational

trust, the population from which the sample of the study was drawn consisted of employees working alongside other co-workers in their respective organisations.

A number of factors (criteria) affected the identification and selection of interviewees for this study. First, given the aforementioned purpose for conducting the qualitative study, the population for this study consisted of employees working alongside other co-workers, thus, to be selected for the study, the participant had to have worked with a co-worker. The second criterion is that the participant had to have worked closely with his/her co-workers. Third, the participant had to have co-workers with the same level of responsibility as that of the participant. Finally, given that it is not a requirement for the minimum sample size for this study to be large (discussed later in this section), the selection of participants was affected by the researcher's desire to select participants from different organisations and departments within these organisations in order to have a representative sample as much as possible.

Participants in this study were recruited using a convenience sampling and a snowball sampling techniques from various organisations in Amman, Jordan. A convenience sample, which "involves selecting haphazardly those cases that are easiest to obtain for your sample" Saunders et al. (2009 , p. 241), was used for a two reasons. First, since within organisations the vast majority of employees work alongside co-workers (the first criterion), there is very little variation within the study's population in relation to this criterion. Saunders et al. (2009) suggest that convenience samples can be chosen when there is very little variation in the study's population. Second, while collecting data for the qualitative study, the researcher was also distributing questionnaires and collecting data from five organisations for the purposes of the quantitative study. This allowed the researcher to have easy access to the desired population for this study and at the same time to select interviewees from a number of different organisations which allowed for more representativeness within the population.

Snowball sampling was used to complement convenience sampling. According to Saunders et al. (2009) in a snowball sampling technique, after making contact with one or two cases of the population, the researcher asks these cases to identify further cases and so on. Given that participants had to have worked closely with a co-worker (the second criterion) and had to be from different departments within the respective organisation (fourth criterion) to participate in this study and due to the potential

difficulty for the researcher to identify such employees within the organisation, it was easier and more practical for the researcher -when conducting interviews onsite- to ask organisational contacts to identify and refer him to participants from different departments and to participants that they know had worked closely with co-workers on tasks or assignments (this would be double checked by the researcher before interviewing participants). When conducting interviews outside the workplace, the researcher asked the participant a number of questions before the interview to ensure that the four criteria applied to him/her.

Finally, the use of each sampling technique (i.e. convenience, snowball) was suitable given the limited resources available to the researcher. Saunders et al. (2009) note that the relative costs of snowball sampling are reasonable while those for convenience sampling are low.

Some of the participants were recruited personally by the researcher; other participants were recruited by organisational contacts who were contacted by the researcher through personal and professional networks. Guest, Bunce, and Johnson (2006) note that guidelines for deciding the sizes of non-probabilistic samples are virtually non-existent. However, Creswell (2007) recommends that in grounded theory studies, the researcher typically conducts 20 to 30 interviews to collect data. Based on this recommendation and taking into consideration the practicalities of carrying out research in Jordan, interviews were conducted with a sample of 20 Jordanian employees in various organizations in Amman, Jordan.

### **2.2.2 Translation of Interview Questions**

Before commencing the interviews, the semi-structured interview questions were initially formulated in English (Please see Appendix 1.1) and then translated into Arabic. The interview questions were based on those used in previous studies with similar research questions and objectives (e.g. Wasti et al., 2011) and were focused on addressing the research questions above. As for the translation process, the researcher first translated the interview questions from English to Arabic, since Arabic is his mother tongue. Two academics from Jordan with a business background and who speak Arabic were then given copies of the English version of the interview questions and also asked to translate them into Arabic. The researcher then met with these two academics to compare the three Arabic translations of the questions, discuss any detected

differences between the translations and resolve these differences in order to reach a collective and final version of the translation. In the event, very few differences between the translations were detected.

That only few differences were detected may be due to the small number of interview questions asked (8 open ended questions excluding the background questions and probing questions) and most of these questions were short. Moreover, most terms and phrases used in the interview questions did not differ in terms of their experiential meaning “the equivalence of meanings of words and sentences for people in their everyday experiences” (Saunders et al., 2009, p.385) when used in different contexts, that is, most of the terms used in the interview questions were familiar to interviewees in all contexts, instead of being familiar only in specific contexts. The final version of the Arabic version of the interview questions along with a copy of the English version of the questions were then given to a professional translator in Jordan to review and provide any comments if necessary. The translator had no comments on the Arabic translation of the interview questions.

### **2.2.3 Pilot Testing the Interview Questions**

The interview questions were pilot tested before commencing the actual interviews. The purpose of this pilot study was to test the clarity and relevance of the interview questions, identify any questions that the interviewees may have felt uncomfortable answering and to determine how long each interview would take. Four participants working in different organisations in Jordan, and working alongside other co-workers within their organisations, were recruited by the researcher through personal networks. The pilot interviews were conducted onsite, during working hours.

Feedback from these four participants showed all the interview questions were clear and understood by the interviewees and that all interviewees were comfortable answering the interviews’ questions. The pilot interviews had an average length of seven minutes, with which all four participants expressed feelings of ease, and stated that the duration of the interviews was convenient to them, since it did not disrupt them from performing their job duties at the workplace. On the other hand, an inspection of the responses provided by these four participants showed that when asked to define trust, some identified the term ‘trust’ with other terms such as ‘confidence in self’ or ‘trust in one self’ and started defining trust in these terms. As a result, the researcher adjusted the



question about the definition of trust, making the term 'trust' less general or ambiguous by clarifying that 'trust in another' was the intended sense and not 'trust in self' or 'self-confidence'.

Another issue was that when asked to identify a co-worker with whom the interviewee had developed a trusting relationship, one interviewee started talking about one of his subordinates, which implied that he thought a co-worker was anyone who worked with him at the same organisation. As a result, when asking the interviewees in the actual interviews to identify a co-worker that they trusted, the researcher made a note to clarify to each interviewee that a co-worker was to be seen as someone with the same level of authority and with similar duties to those of the interviewee, and not a supervisor or a subordinate.

#### **2.2.4 The Interviews**

Thirteen semi-structured interviews took place on-site during working hours, and a further seven were interviewed outside of their respective organisations. The researcher based the decision of where and when the interview was conducted on the convenience of each interviewee. All participants worked alongside one or more co-worker at their respective workplaces and all were interviewed in their native language (Arabic). The interview durations ranged from just over three minutes to some sixteen minutes with a mean of 9.62 minutes.

The relatively short duration of the interviews is considered one of the limitations of this study. This is because such short durations may give the initial impression of a problem in relation to the depth of the interviews and the credibility of results produced from analysis of interview data. However, there are a number of factors that may provide explanation and justification for why the interviews were relatively short. These factors relate to the nature of the interview questions, characteristics of the interviewees, the setting in which the interviews were conducted and nature of the topic explored in these interviews. These factors are discussed next before resuming the description and reporting of how the interviews were conducted.

- 1- The initial purpose and consequent scope of the qualitative study was narrow to begin with. Thus, interview questions were set for the sole purpose of exploring the antecedents of co-worker trust/distrust within Jordanian organisations and thus,

provide empirical evidence that tested the use of trustworthiness scales (developed in western countries) within the context of Jordanian organisations. This indeed had the effect of limiting the focus of the interviews (in terms of what to look for in the responses of the interviewees) and the number of questions asked, thus, reducing the depth and duration of the interviews.

- 2- The number of interview questions was relatively small. Specifically, four questions to collect demographic data and eight questions to address the qualitative study's research questions (please refer to Appendix 1.1).
- 3- Except for the two questions asking participants to narrate a critical incident that caused them to trust/not trust a co-worker (please refer to interview questions 9 and 12 in Appendix 1.1) and responses to these two questions in Appendix 1.2), all other interview questions (due to the nature of the response they are asking the respondent to provide) did not require much elaboration to be adequately answered. For example, the first four questions (i.e. 1, 2, 3, 4 in Appendix 1.1) are demographic questions to solicit responses relating to the interviewee's age, organisational position, education level and tenure and can be answered with few words and in a matter of few seconds. Some other questions (i.e. 6, 7 and 10 in Appendix 1.1) can only be answered with a 'yes' or 'no' response and sometimes the yes or no response are elaborated with a brief explanation (please refer to Appendix 1.2 for examples of responses to these three questions) and thus are also answered fully in a matter of few seconds. The remaining three questions (i.e. interview questions 5, 8 and 11 Appendix 1.1) also did not require much time to be answered since a 'minimum' requirement to answer these questions can be achieved with either few words or a number of sentences depending on what the respondent considers to be sufficient (examples of responses in Appendix 1.2). For example, question 5 asked participants to provide their own definition of trust, which in all cases did not exceed a few sentences (please refer to interview transcripts in Appendix 1.2 for examples of responses to question 5). Questions 8 and 11 asked participants to state the characteristics and behaviours that made them trust/distrust their co-worker and some respondents used few words to answer this question (e.g. interview number 9, question 8 and 11, appendix 1.2), others provided a more elaborated response (e.g. interview number 4 and 7, question 8, appendix 1.2). Each response for these two questions ranged from a few seconds to few minutes.

- 4- Some factors were related to the interviewee. For example, some interviewees could not think of a critical incident (questions 9 and 12 in Appendix 1.1) and thus did not provide one (e.g. please refer to interview transcript 9, question 9 in Appendix 1.2 for an example). Others did not elaborate or go in to much detail when narrating the critical incident (e.g. please refer to interview transcript 4, question 9 and interview 9, question 12 in Appendix 1.2 for examples) even though the researcher attempted to encourage more elaboration and detail. The interviewees' lack of elaboration in relation to the critical incident questions and even some other questions can be attributed to the cultural background of the interviewees, which is discussed next.
- 5- As noted in chapter one, Jordanians generally score high on the cultural dimension 'uncertainty avoidance' (Alkailani et al., 2012) potentially causing the interviewees to be reluctant to talk more or elaborate their responses.
- 6- Another factor that may have affected the interviewees' elaboration and consequently the duration of the interviews is the sensitive nature of the topic explored in these interviews (i.e. trust/distrust in a co-worker). Even though the researcher ensured the confidentiality of interviewees' responses, the sensitivity of the topic of trust to most people coupled with the interviewees' unfamiliarity with the researcher may have made participants reluctant, wary and reserved in their responses.
- 7- The majority of interviews were conducted onsite as noted earlier. Thus, even though a sense of urgency was not expressed explicitly by any of the interviewees, the researcher felt that many of the interviewees had work commitments that made them inclined to go through the interview quickly and provide concise responses so that they could return to their work.

Each one of the interviews started with the researcher explaining to the interviewee the general purpose of the qualitative study and the interview. Given that the themes (e.g. trust and distrust or not trusting in a co-worker) of the interview questions are of a sensitive and personal nature, there was a need to encourage the interviewee to cooperate and not hold back any information when responding to the interview questions. Thus, the researcher attempted to encourage the interviewee to cooperate by:

- 1- Instructing the participant to not mention his/her own name or that of the co-worker during the interview.
- 2- Giving the participant the choice to refuse to answer any questions he did not want to answer or providing any information he did not want to divulge.
- 3- Giving the participant the choice to withdraw from the interview whenever he wished.
- 4- Informing the participant that there were no right or wrong answers to the interview questions, and that he can talk as much as he wishes with no time restrictions.
- 5- Informing the participant how long the interview is estimated to last.
- 6- And finally, guaranteeing to the participant the confidentiality of the responses that he provided and how the collection, analysis, and use of the responses would be carried out for the purposes of scientific enquiry only and in such a way that would keep the identity of the interviewee anonymous.

The researcher then sought the verbal consent of the interviewee to be interviewed, and having explained the reasons for tape recording the interview asked for permission to do so. The researcher repeated the assurance of confidentiality of the responses emphasising that no responses would be made known to anyone in his/her organisation or elsewhere at any time.

Next, background information was collected from the interviewee (e.g. age, tenure). Then, following a similar approach to the one used by Wasti et al. (2011) in their qualitative study examining the antecedents of trust in two countries (Turkey and China), the researcher asked respondents first to define the concept of trust and then to identify a co-worker with whom they had established a trusting relationship. After instructing the interviewee to think about the co-worker that he had identified when answering the following questions, the researcher asked the interviewee why he trusted that co-worker in terms of characteristics and behaviours exhibited by that co-worker. Finally, the interviewee was prompted to report a critical incident that involved him and the co-worker, and that instigated the interviewee to start forming trust towards the co-worker or increase the trust he had in that co-worker. The same questions were

repeated for distrust. A critical incident technique “in which participants are asked to describe in detail a critical incident or number of incidents that are key to the research question” (Saunders et al., 2009, p.332) was used in this thesis because according to Lewicki et al. (2006) in addition to their high external validity, qualitative methods such as critical incident techniques, diary accounts and narratives allow insight into the way that trust is socially and subjectively constructed. Furthermore, past researchers (e.g. Wasti et al., 2011) used a critical incident technique to address research questions similar to those of this study.

During the interview, probing questions, based on the advice of Saunders et al. (2009, p.339) that “the intention will be to encourage exploration of the point made without offering a view or judgment on your part”, were asked to further explore the responses provided by the interviewees and to encourage them to elaborate more in their responses. The probes varied between interviews. Examples include: “was there anything else (you have not mentioned before) that affected your trust in your co-worker?”. Other probes following the critical incident included: “what did your co-worker do in that critical event?” or “what did your co-worker say in that critical event?” and “what were the consequences of what your co-worker did or said?”.

At the end of the interview, the interviewee was asked again about how he felt about the interview and whether they would still give their consent for their responses to be used in this study. All the interviewees gave verbal consent again at the end of the interview.

#### **2.2.5 Sample Characteristics**

The background data collected from the 20 participants during the interviews were quantitatively analysed using SPSS software. The analysis showed that 85% of the sample were male participants; the average age of the 20 participants was 35.45 years, with 75% of the sample aged 32 years or more. 80% of the sample held non-managerial positions in their organisations. The 20 participants were highly educated since 90% of the sample consisted of participants who had a university degree (40% bachelor’s degree; 25% Master’s degree; and 25% PhD degree). Finally, the average tenure of the 20 participants was 7.64 years, with a minimum tenure of 6 months, and a maximum tenure of 20 years.

### **2.2.6 Analysis of the Interviews**

All 20 interviews were tape-recorded and then transcribed verbatim in Arabic. The analysis of the transcripts of the interviews was based to a large extent on the procedure followed by Wasti et al. (2011) in their content analysis qualitative study. According to Grbich (2013) content analysis is a systematic coding and categorising approach that can be used to explore large amounts of textual information in order to determine the trends, patterns, frequency and relationships of words used.

The following procedure was followed to analyse the interviews; first, the researcher and another coder (a PhD candidate at Durham Business School) each read the transcripts in their common native language (Arabic). Then each of the two coders separately read each interviewee's responses and then identified and listed and coded the themes (in trust definitions) and factors (affecting trust and those affecting distrust) as appropriate. Subsequently, the researcher and the other coder met and compared their identified themes and lists of factors that contributed to development of trust and distrust. Discrepancies resulting from the comparisons were then resolved through extensive discussions between the two coders. This process resulted in the production of a pared down list of themes and antecedents.

The agreed upon list of identified themes and factors, was handed to a third coder (a PhD candidate at Durham Business School) along with the interview transcript. The third coder separately checked the list in terms of the presence or absence of each theme and factor in interviewee responses. As a result, all identified themes and factors were found to be present in the interview transcripts. The principal researcher then labelled and defined each theme and factor identified in the final version of the list. The researcher designed a coding manual 'codebook' which included a current list of defined elements present in trust definitions and a list of existing codes (antecedents) with each code being defined. Furthermore, the codebook also included available measures for these elements and antecedents. These were based on a review of previous literature on the nature of trust and antecedents of co-worker trust. The researcher decided to place this step at this stage of the analysis procedure as opposed to the beginning of the procedure in order to perform the coding process free of preconceptions as much as possible.

Using a deductive approach to qualitative analysis and what is referred to as a ‘directed content analysis’ approach which “involves the use of more analytic codes and categories derived from existing theories and explanations relevant to the research focus.” (Berg and Lune, 2012, p.352), the principal researcher coded each theme derived from trust definitions to two main categories; ‘Willingness to accept vulnerability’ and ‘Positive expectations’ drawing on items from four scales developed to measure interpersonal trust and one developed to measure trustworthiness perceptions.

The five scales used were:

- 1- The ‘Managerial Interpersonal Trust’ scale developed by McAllister (1995).
- 2- The ‘Organizational Trust Inventory’ scale developed by Cummings and Bromiley (1996).
- 3- Two versions of the ‘Organisational Trust’ scale, one developed by Mayer and Davis (1999), the other developed by Mayer and Gavin (2005).
- 4- The Mayer and Davis (1999) scale to measure trustworthiness perceptions.
- 5- And the ‘Behavioural Trust Inventory’ developed by Gillespie (2003).

According to McEvily and Tortoriello (2011) the ‘Organisational Trust’ and the ‘Behavioural Trust Inventory’ scales focus on measuring the ‘willingness to be vulnerable’ element of trust; the ‘Organisational Trust Inventory’ scale focuses on measuring the ‘positive expectations’ element and; as for the ‘Managerial Interpersonal Trust’ scale, it measure both elements of trust. The use of the Mayer and Davis (1999) measure of trustworthiness perceptions to identify themes that reflect the positive expectation element of trust was based on Colquitt et al.’s (2007, p.913-914) note that some “positive expectations measures instead referenced expectations to the qualities and characteristics of the trustee, thereby assessing ability, integrity and benevolence in addition to trust”.

Finally the principal researcher coded each factor of trust to one or more of the following main categories, based on Dietz and Den Hartog’s (2006) content analysis of 14 trust measures: Ability, Benevolence, Integrity, Predictability, Identification and General. Antecedents that did not fall into these six categories were coded by drawing

on factors identified in previous literature on co-worker trust. As for identified antecedents of distrust, they were also coded to one or more of the main six categories. This was done because “there is wide agreement that trust and distrust attitudes develop from beliefs about another person’s trustworthiness.” (Conchie, Taylor and Charlton, 2011, p. 1209). These same authors (Conchie et al., 2011) further state that the categories of ability, benevolence and integrity also capture the trustworthiness antecedents of distrust. When a decision was made concerning which category a factor belonged to, care was taken to base that decision on items that would reflect the same main category whether the referent of trust was a manager, peer or a subordinate employee.

## **2.3 Data Quality Issues**

According to Matthews and Ross (2010) in social research four key aspects of research quality exist: reliability or dependability; validity and credibility; generalizability and transferability; and finally ethical practice. Saunders et al. (2009) state that data quality issues such as reliability and validity can be identified when using semi-structured interviews. Issues of validity and reliability will be discussed next.

### **2.3.1 Validity and Credibility**

In terms of the data collection instrument, validity is defined as “the extent to which an instrument is measuring what it is intended to measure” (Holsti, 1969, p.142). In the case of research findings, validity “is concerned with whether the findings are really about what they appear to be about.” (Saunders et al., 2009, p.157). Stated differently, validity “...refers to the accuracy of a result. Does it ‘really’ correspond to, or adequately capture, the actual state of affairs?” (Robson, 2002, p.100). Flick (2011) advises that when focusing on evaluating the validity of results, internal validity and external validity must be checked. According to Sekaran (2003, p.150) “external validity refers to the extent of generalizability of the results of a causal study to other settings, people, or events, and internal validity refers to the degree of our confidence in the causal effects (i.e., that variable X causes variable Y)”.

Robson (2002, p.175) suggests that “triangulation can help to counter all of the threats to validity”. Furthermore, while Lewicki et al. (2006) note that qualitative methods such



as critical incident techniques and in-depth interviews have high external validity, they suggest triangulating such methods with survey data, to limit the problems of internal validity inherent in these methods. Triangulation is “a research approach employing more than one perspective, theory, participant, method or analysis. The notion is that this helps in getting a better ‘fix’ on the object of study” (Robson, 2002, p.553). Given that this thesis uses interview and questionnaire data to examine antecedents of co-worker trust, problems of internal validity can be countered. However, the antecedents of distrust were only examined using interview data and hence triangulation does not apply and the possible threats to internal validity are considered as one of the limitations of this thesis.

Credibility (or believability) “of the researcher’s interpretations of the data she has gathered is tested by the transparency of the analysis and interpretation of the data, for example, by testing out the interpretation of the data with the research participants or by setting the interpretations alongside existing theory” (Matthews and Ross, 2010, p.12). This aspect of research quality is checked by comparing the study findings with previous literature and explaining them with existing theory.

### **2.3.2 Reliability and Dependability**

According to Robson (2002) reliability in qualitative research is associated with the use of standardized research instruments. With regard to interviews as a data collection tool, Saunders et al. (2009, p.326) state that “the lack of standardisation in such interviews may lead to concerns about reliability.”. Robson (2002, p.176) supports this by stating that “the general non-standardization of many methods of generating qualitative data precludes formal reliability testing.”.

Reliability can be defined as “the extent to which a measurement procedure yields the same answer however and whenever it is carried out.” (Kirk and Miller, 1986, p.19). Stated differently, reliability is “the extent to which your data collection techniques or analysis procedures will yield consistent findings” (Saunders et al., 2009, p.156). Since the questions used in the semi-structured interviews were modelled after interview questions from previous research (e.g. Wasti et al., 2011) answering similar research questions as the ones here, and given that the questions used in the semi-structured interviews were standardized in all 20 interviews conducted for the purposes of this thesis (the only unstandardized aspect of the interviews were the probing questions, and

these questions' primary purpose was to encourage the participant to elaborate more on his/her responses), concerns about this aspect of reliability can be reduced.

"The concern about reliability in these types of interview is also related to issues of bias." (Saunders et al., 2009, p.326). Robson (2002) also lists as causes for unreliability: participant error, participant bias, observer error and observer bias. In order to deal with participant error, as described in previous sections of this chapter, the researcher attempted to encourage participants to participate and elaborate in their response (e.g. guaranteeing to participants the confidentiality of their responses, informing participants of the expected duration of the interview, conducting the interview wherever and whenever it was convenient to the participant), probing questions were also asked to encourage participants to elaborate in their responses. Participant bias was also dealt with by attempting to eliminate socially desirable responding in terms of participants' feeling that they had to say what they thought their bosses or the researcher wanted them to say. This was done by guaranteeing to participants the confidentiality of their responses and that no one in their respective organisations, especially their managers, would have access to their responses. The researcher explained to them that there are no right or wrong answers to the questions and that the analysis and presentation of the results would be carried out in a way that would make it impossible to identify who any of the respondents are. Observer error and observer bias were generally countered through the use of data triangulation.

According to Matthews and Ross (2010) dependability is frequently referred to in relation to qualitative research methods and it applies to consistency in research practice, by for example, making sure all data is included and that none is lost through unreliable audio recorders or inaccurate transcribers. As was described in previous sections in this chapter, all 20 interviews conducted were included in the study with no omissions, and they were all transcribed verbatim. Furthermore, there were no problems relating to the recording of the interviews. Therefore, this measure of research quality was adhered to in this study.

## **2.4 Summary**

This chapter an overview of the methods and procedures used to collect and analyse qualitative data to address the first two research questions in this thesis. First the use of

semi-structured interviews as a data collection tool was justified followed by a description of the procedures followed to recruit participants, translate the interview question in to Arabic, pilot testing of the interview questions, conduct of the interviews and the steps followed to analyse the collected data. The major ethical issue of anonymity of participants and their responses was addressed and a number of data quality issues were discussed. The following chapter will present the findings produced from the analysis of interview data collected from participants.

## **CHAPTER THREE**

### **Analysis of Qualitative Data**

#### **3.1 Introduction**

This chapter presents the results of the content analysis of responses provided by members of the Jordanian sample with regard to three areas: how they define/view trust, antecedents of co-worker trust and antecedents of co-worker distrust (not trusting). For each of the areas, a description of the themes and antecedents and of main categories into which they fall is provided. In doing so, the indigenous manifestations representing Jordanian employees' views of the concept of trust and their views of the antecedents of trust and distrust are presented. Throughout this description, quotations from interviewees are presented to illustrate these local manifestations (i.e. the themes identified within trust definitions and the antecedents of trust and distrust). Next, for the themes identified in the definition of trust, the extent to which each theme affects how trust is viewed by the Jordanian sample is described. Similarly, for the section focusing on the indigenous manifestations of the antecedents of trust and distrust, the extent to which each antecedent affects the development of trust and distrust in a co-worker will also be reported. To perform this analysis, the number of instances where a particular theme or antecedent was identified was calculated. Since each response provided by respondents may have involved more than one theme or more than one antecedent, the sum of the frequencies of either the identified themes or the identified antecedents is larger than the number of responses provided ( $n=20$ ).

Finally, it should be noted that few of the identified themes and antecedents (shown in tables presented in this chapter) were each mentioned once throughout the 20 interviews. That is, each is mentioned by only one of the 20 interviewees. This may indicate that some of the interview data is non-representative of the actual population and thus, this limits generalisations from this particular data. According to Saunders et al. (2009) likely concerns surrounding the generalisability of results from semi-structured and in-depth interviews are based on the use of small and unrepresentative

number of interviewees. Thus, the occurrence of such unrepresentative data might be due to the small size of the sample in this study.

## 3.2 Results

### 3.2.1 Jordanian Employees' View of Trust: Themes in Trust Definitions

The content analysis of the trust definitions provided by Jordanian respondents resulted in a total of 16 identified themes representing indigenous manifestations of how Jordanian employees view the concept of trust. These themes with their categories and frequencies are summarized in table 3.1. Each identified theme was classified under one of two main categories; 'willingness to be vulnerable' and 'positive expectations'. In some few cases, the theme would fall under the two categories.

Table 3.1: List and frequency of themes in trust definitions provided by the Jordanian sample (n=20)

| #  | Themes                    | Main category  | Frequency<br>(N= 20) |
|----|---------------------------|--|----------------------|
| 1  | Comfortableness           | Willingness to be vulnerable.  | 8 (40%)              |
| 2  | Reassurance               | Willingness to be vulnerable.  | 1 (5%)               |
| 3  | Safeness                  | Willingness to be vulnerable.  | 4 (20%)              |
| 4  | Disclosure                | Willingness to be vulnerable.  | 4 (20%)              |
| 5  | Keeping of secrets        | Positive expectations.   | 5 (25%)              |
| 6  | Absence of ill intentions | Positive expectations.   | 2 (10%)              |
| 7  | Intimacy                  | Willingness to be vulnerable and positive expectations /Affective based trust. | 4 (20%)              |
| 8  | Openness                  | Willingness to be vulnerable.  | 3 (15%)              |
| 9  | Carelessness              | Willingness to be vulnerable.  | 6 (30%)              |
| 10 | Concern                   | Positive expectations  | 1 (5%)               |
| 11 | Dedication                | Positive expectations / Cognition-based trust                                  | 2 (10%)              |
| 12 | Dependability             | Willingness to be vulnerable & Positive expectations /cognition-based trust    | 8 (40%)              |
| 13 | Respect                   | Positive expectation   | 2 (10%)              |
| 14 | Cooperation               | -----  | 2 (10%)              |
| 15 | Sincerity                 | Positive expectations  | 4 (20%)              |
| 16 | No exploitation           | Positive expectations  | 1 (5%)               |

*Note.* The denominator for the percentage reported for every theme is the number of trust definitions provided by Jordanian respondent (n=20). Table template adapted from "Antecedents of Trust across Foci: A Comparative Study of Turkey and China". By Wasti, S, A., Tan, H, H., and Erdil, S, E. (2011). *Management and Organization Review*, 7 (2), p.286.

Several researchers (e.g. Colquitt et al., 2007; Rousseau et al., 1998) agree that these two main elements are manifest in several trust definitions. McEvily and Tortoriello (2011) show in their paper titled ‘Measuring Trust in Organizational Research: Review and Recommendations’ that there are a number of trust measures (e.g. ‘Managerial Interpersonal Trust’ scale; ‘Organisational Trust’ scale; ‘Behavioural Trust Inventory’ scale) that focus on measuring either one or both of these elements. Appendix 2.1 presents examples of trust scale items that show how the identified themes were presented.

### **3.2.1.1 Jordanian Employees’ View of the ‘Willingness to be Vulnerable’ Element of Trust**

Six themes were categorized under the element ‘willingness to be vulnerable’, thus describing how Jordanian employees view this element of trust. These themes included:

- 1- Comfortableness, which refers to the trustor feeling comfort towards the trustee when dealing with that trustee.
- 2- Reassurance, which refers to the trustor feeling reassurance towards the trustee when dealing with that trustee.
- 3- Safeness, which refers to the trustor’s feeling that the trustee is safe to conduct dealings with.
- 4- Disclosure, which refers to the trustor revealing his/her secrets to the trustee.
- 5- Openness, which refers to the trustor being able to communicate freely and openly with the trustee.
- 6- Carelessness, which refers to the trustor being relatively less careful and wary towards the trustee compared to those he/she distrust by acting and talking freely in front of the trustee without worrying about the consequences.

The following quotes exemplify such themes under this category:

*“when you have trust in (X), there will be a sense of comfort when conducting dealings with this individual, there will no longer be something called (.....Pause.....), I mean even on the level of topics that you raise with the other person and also your opinions and Ideas, they become more opened” (Jordanian interviewee 2)*

*“The extent of comfort towards the person and how much I can communicate with him, how much I can depend on him, and to be able to reveal my secrets to him” (Jordanian interviewee 15)*

### **3.2.1.2 Jordanian Employees’ View of the ‘Positive Expectations’ Element of Trust**

As for the ‘positive expectations’ category, the following seven themes were classified under this category and thus, describe how Jordanian employees view this element of trust.:

- 1- Keeping of secrets, which refers to the trustor expecting the trustee not to divulge any secrets of the trustor to others.
- 2- Absence of ill intentions, which refers to the trustor expecting the trustee to not use any information he/she knows about the trustor to harm that trustor.
- 3- Concern, which refers to the trustor expecting the trustee to maintain the interests of the trustor.
- 4- Dedication, which refers to the trustor expecting the trustee be dedicated in his/her job.
- 5- Respect, which refers to the trustor expecting the trustee to honour his/her oral or written agreements with the trustor and keep his/her words and to respect each other’s opinions.
- 6- Sincerity, which refers to the trustor expecting his/her relationship with the trustee to be genuine and free of hypocrisy.
- 7- No exploitation, which refers to the trustor expecting the trustee not to exploit (steal) the trustor’s efforts to serve his/her own interests.

The following quotes exemplify such themes under this category:

*“Trust is mutual respect and respecting oral and written agreements, (....pause....) when I give you my word to be honest and keep my word” (Jordanian interviewee 9)*

*“Trust (I can say about it) is that the person facing me will be containing the secrets that I give him/her in a way and preserve these secrets” (Jordanian interviewee 17)*

Two themes ('Intimacy' and 'Dependability') were categorised under both willingness to be vulnerable and positive expectations. Intimacy refers to the trustor having familiarity with the trustee and having a loving, brotherly and close relationship with the trustee. 'Dependability', refers to the trustor being dependant on the trustee to behave in a certain way (e.g. to respond to the trustor's demands or help and support the trustor even when this help is not asked for directly). The following quotes exemplify such themes under this category:

*"As long as you reached the stage of trust in this person, you will be like you are treating him/her with more intimacy, meaning, he/she will be close to you" (Jordanian interviewee 2)*

*"The person I trust is supposed to protect my back, whatever happens between us, stays between us, and if something happened to me, he/she will be my support, even if I did not ask him/her to be" (Jordanian Interviewee 3)*

Some of the aforementioned themes were also found to fit under one of the two trust dimensions (cognition-based trust and affect-based trust) conceptualised by McAllister (1995). For example, the theme intimacy fits well with the definition of affect-based trust which refers to trust that is "grounded in reciprocated interpersonal care and concern" (McAllister, 1995, p.25). Moreover, themes such as 'Dependability' and 'dedication' were suitably branded under cognition-based trust since it refers to trust that is "grounded in individual beliefs about peer reliability and dependability" (McAllister, 1995, p.25). Finally, one theme, 'cooperation' was not included under any of the main categories because the trust measures used to categorize identified themes did not include any items that reflect this theme. Furthermore, Mayer et al. (1995) differentiated between trust and cooperation and separated the two concepts.

Examination of the frequencies of these themes in table 3.1 shows that the categories (willingness and positive expectations) were both fairly important in describing how Jordanian employees view interpersonal trust within an organisation. Themes classified under 'willingness to be vulnerable' were mentioned by respondents 26 times, on the other hand, themes under the category 'positive expectations' were mentioned 17 times. As for themes classified under both categories combined, they were mentioned by respondents 12 times. Furthermore, table 3.1 shows that the Jordanian employees' views of trust can also be described using the trust dimensions of cognition-based and



affect-based trust, since themes fitting the cognition-based trust category were recited 10 times, while themes fitting the affect-based trust category were mentioned 4 times.

### **3.2.2 How Jordanian Employees View the Antecedents of Trust and Distrust in Co-worker (Indigenous Manifestations)**

Antecedents of trust and those for distrust in a co-worker were elicited from respondents by asking all of them to 1) report two critical incidents (one that developed their trust in a co-worker and another that developed their distrust in a co-worker) and 2) explicitly state what made them trust a co-worker and what made them distrust a co-worker in terms of characteristics and/or behaviours exhibited by the co-worker. Table 3.2 and table 3.3 show that while all 20 interviewees were able to explicitly state the factors that made them trust a co-worker and those that made them distrust a co-worker, only 18 recounted a critical incident in relation to developing trust in a co-worker and 19 were able to report a critical incident in relation to developing distrust in a co-worker.

In relation to antecedents of trust and as seen in table 3.2, the content analysis of the critical incident responses and the explicit responses revealed a total of 28 trust antecedents for the Jordanian sample. The classification of these 28 antecedents resulted in the formation of 8 main antecedent categories; Ability, Benevolence, Integrity, Predictability, Reciprocity, General, Identification and Physical features. Appendix 2.2 (for antecedents identified from critical incident responses) and Appendix 2.3 (for antecedents identified from explicit responses) provide examples of scale items that show how these identified antecedents are presented in scales developed to measure trustworthiness components.

As for the antecedents of distrust, table 3.3 shows that the content analysis of the critical incident responses and the explicit responses resulted in the identification of 23 distrust antecedents for the Jordanian sample. The classification of these 23 antecedents resulted in the formation of 8 main antecedent categories; Ability, Benevolence, Integrity, Predictability, Identification, General, Non Reciprocity and Reciprocity. Furthermore, the first five categories were relabelled by the researcher to more accurately reflect the nature of the antecedents they include as follows: 'Lack of ability', 'Lack of benevolence', 'Lack of integrity', 'Lack of predictability' and finally 'Lack of Identification'.

Table 3.2: List and frequency of antecedents of trust in co-worker provided by the Jordanian sample (n=20)

| #  | Antecedent of trust            | Main category                          | Frequency from critical incident (N=18) | Frequency from explicit responses (N= 20) |
|----|--------------------------------|--|---|---|
| 1  | Concern                        | Benevolence                            | 3 (17%)                                 | 3 (15%)                                   |
| 2  | Sincerity                      | Benevolence/ Integrity                 | 4 (22%)                                 |   |
| 3  | Support in personal situations | Benevolence/ ability                   | 4 (22%)                                 |   |
| 4  | Support in work situations     | Benevolence/ ability                   | 7 (39%)                                 |   |
| 5  | Protection                     | Benevolence                            | 4 (22%)                                 | 1 (5%)                                    |
| 6  | Keeping of secrets             | Benevolence/ Integrity/ Predictability | 1 (5%)                                  | 3 (15%)                                   |
| 7  | Empathy                        | Benevolence                            | 1 (5%)                                  |   |
| 8  | Consideration                  | Benevolence                            |   | 2 (10%)                                   |
| 9  | Intimacy                       | Benevolence                            |   | 5 (25%)                                   |
| 10 | Kindness                       | Benevolence                            |   | 7 (35%)                                   |
| 11 | Understanding                  | Benevolence                            |   | 2 (10%)                                   |
| 12 | Loyalty                        | Benevolence                            |   | 2 (10%)                                   |
| 13 | Good intentions                | Benevolence                            |   | 2 (10%)                                   |
| 14 | Capability                     | Ability                                | 3 (17%)                                 | 15 (75%)                                  |
| 15 | Probity in work                | Ability/ Integrity                     |   | 3 (15%)                                   |
| 16 | Dependability                  | Ability/ Predictability                |   | 2 (10%)                                   |
| 17 | Educated                       | Ability                                |   | 1 (5%)                                    |
| 18 | Upright behaviour              | Integrity                              | 1 (5%)                                  | 1 (5%)                                    |
| 19 | Honesty                        | Integrity                              |   | 12 (60%)                                  |
| 20 | Acting Justly                  | Integrity                              |   | 1 (5%)                                    |
| 21 | Religious commitment           | Integrity/ Predictability              |   | 5 (25%)                                   |
| 22 | Morality                       | Integrity                              |   | 3 (15%)                                   |
| 23 | Responsibility                 | Integrity                              |   | 2 (10%)                                   |
| 24 | Being trusted                  | General                                |   | 1 (5%)                                    |
| 25 | Reciprocity                    | Reciprocity                            | 1 (5%)                                  | 4 (20%)                                   |
| 26 | Physical characteristics       | Physical features                      |   | 1 (5%)                                    |
| 27 | Common characteristics         | Identification                         |   | 5 (25%)                                   |
| 28 | Support                        | Benevolence/ ability                   |   | 6 (30%)                                   |

*Note.* The denominator for the percentages reported for every antecedent is the number of critical incidents (n=18) & the number of explicit responses (n=20) reported by Jordanian respondents. Table template adapted from “Antecedents of Trust across Foci: A Comparative Study of Turkey and China”. By Wasti, S. A., Tan, H. H., and Erdil, S. E. (2011). *Management and Organization Review*, 7 (2), p.286.

Table 3.3: List and frequency of antecedents of distrust in co-worker provided by the Jordanian sample (n=20)

| #  | Antecedent of distrust       | Main category                        | Frequency from critical incident (N=19) | Frequency from explicit responses (N=20) |
|----|------------------------------|--------------------------------------|---|--|
| 1  | Credit thief                 | Benevolence/integrity                | 3 (15.7%)                               |  |
| 2  | Selfish                      | Benevolence                          | 3 (15.7%)                               | 6 (30%)                                  |
| 3  | Betrayal of trust            | Benevolence/integrity/predictability | 3 (15.7%)                               | 2 (10%)                                  |
| 4  | Ill intent                   | Benevolence                          | 3 (15.7%)                               |  |
| 5  | Provocative                  | Benevolence                          | 1 (5%)                                  |  |
| 6  | Information fishing          | Benevolence                          | 1 (5%)                                  | 2 (10%)                                  |
| 7  | Not supportive               | Benevolence/ability                  | 1 (5%)                                  | 1 (5%)                                   |
| 8  | Antisocial behaviours        | Benevolence/integrity                |   | 8 (40%)                                  |
| 9  | Hypocrisy                    | Benevolence/integrity                |   | 3 (15%)                                  |
| 10 | Envy                         | Benevolence                          |   | 2 (10%)                                  |
| 11 | Neutral emotions             | Benevolence                          |   | 2 (10%)                                  |
| 12 | Incapability                 | Ability                              | 4 (21%)                                 | 7 (35%)                                  |
| 13 | Unattractiveness             | Ability                              |   | 3 (15%)                                  |
| 14 | Incompatibility              | Integrity                            | 3 (15.7%)                               |  |
| 15 | Promise breaking             | Integrity/predictability             | 1 (5%)                                  | 1 (5%)                                   |
| 16 | Disappointing                | Integrity/predictability             | 1 (5%)                                  |  |
| 17 | Gossiping                    | Integrity                            | 4 (21%)                                 | 3 (15%)                                  |
| 18 | Lying                        | Integrity                            |   | 6 (30%)                                  |
| 19 | Moodiness                    | Predictability                       |   | 2 (10%)                                  |
| 20 | Non reciprocity (of favours) | Non reciprocity                      | 3 (15.7%)                               |  |
| 21 | Being distrusted             | General                              | 1 (5%)                                  |  |
| 22 | Uncommon characteristics     | Identification                       |   | 2 (10%)                                  |
| 23 | Reciprocity of distrust      | Reciprocity                          |   | 1 (5%)                                   |

*Note:* the denominator for the percentages reported for every antecedent is the number of critical incidents (n=19) & the number of explicit responses (n=20) reported by Jordanian respondents. Table template adapted from “Antecedents of Trust across Foci: A Comparative Study of Turkey and China”. By Wasti, S, A., Tan, H, H., and Erdil, S, E. (2011). *Management and Organization Review*, 7 (2), p.286.

The following sections will present how Jordanian employees view these trustworthiness antecedent categories for both trust and distrust by presenting the indigenous manifestations for each of the antecedent categories described earlier for trust and distrust.

### **3.2.2.1 How Jordanian Employees View Benevolence:**

As seen in table 3.2, 14 trust antecedents were categorised under benevolence (some of which were also categorised under other categories). These 14 trust antecedents represent Jordanian employees' view of benevolence or in other words, they represent some of the indigenous manifestations of benevolence within a Jordanian context. These indigenous manifestations of benevolence derived from both critical incidents and explicit responses included: concern, sincerity, support in personal situations, support in work situations, protection, keeping of secrets, empathy, consideration, intimacy, kindness, understanding, loyalty, good intentions and support in general. In relation to the last antecedent (i.e. support), it is the same as the two antecedents 'support in work situations' and 'support in personal situations'. However, these two antecedents were derived from critical incident responses were as the 'support' antecedent was derived from explicit responses and represents a combination of the two antecedents. The 14 antecedents are defined in table 3.4.

The following quotes exemplify some of the antecedents under this category:

*“There is more than one situation that made me trust this co-worker, meaning, he helped me a lot at work. One time we had an event at the company, and I was still new to the job, he helped me with all the steps that I was required to do, from that point, I started to trust him, and with every situation he helped me with and provided me with advice in, my trust would increase in him. He used to give me advice to for example ‘be careful of this person, be wary of that person, and do this...’, and I discovered with time that all his advice was honest and true.” (Jordanian interviewee 15)*

*“She is like, whatever situation is happening to me, she defends me. As characteristics, she is honest; she likes to make me understand everything at work, if there is something wrong, she would be like, no don't do that, meaning she like to advise me, (the interviewee repeats some of the information provided previously), I sense that she feel towards me as I'm a sister of hers, and she loves me, and the nice thing about her is that*

*‘her heart is on her tongue’, if a problem occurred between me and her, she would tell me immediately, and she will not hide anything in her heart.” (Jordanian interviewee 3)*

Table 3.4: Definitions for manifestations of benevolence within a Jordanian context

| #  | Antecedent                     | Definition   |
|----|--------------------------------|--|
| 1  | Concern                        | The trustee showing attention and concern for the trustors’ interests and well-being.  |
| 2  | Sincerity                      | The trustee being genuine in his/her attempts to help the trustor.   |
| 3  | Support in personal situations | The trustee providing help, advice and guidance for the trustor in situations outside the workplace.   |
| 4  | Support in work situations     | The trustee helping out the trustor in carrying out work duties and providing advice, guidance and information to help the trustor in work situations. |
| 5  | Protection                     | The trustee protecting the trustors back, rights and interests at work.  |
| 6  | Keeping of secrets             | The trustee not divulging the trustors’ secrets to others  |
| 7  | Empathy                        | The trustee showing willingness to listen to the trustors personal issues and problems and exhibit understanding of the trustors point of view.        |
| 8  | Consideration                  | The trustee listening to and seeking the counsel of the trustor.   |
| 9  | Intimacy                       | The trustee holding affectionate feelings towards the trustor, and sharing a close and brotherly relationship with the trustor.                        |
| 10 | Kindness                       | The trustee being kind with the trustor and with others and treating them in a good manner and being attentive to their needs.                         |
| 11 | Understanding                  | The trustee understanding the trustor’s point of view, and enduring any heavy banter from the trustor.   |
| 12 | Loyalty                        | The trustee not betraying the trustor or ‘stabbing him in the back.  |
| 13 | Good Intentions                | The trustee being good natured and not having any ill intentions towards the trustor.  |
| 14 | Support                        | The trustee providing help, guidance, useful information and advice to the trustor at work and outside the workplace whenever help is needed.          |

### 3.2.2.2 How Jordanian Employees View Lack of Benevolence

Inspection of table 3.3 show that 11 antecedents were classified under the category ‘Lack of benevolence’. The perceived lack of benevolence of a trustee manifests itself within a Jordanian context through the following distrust antecedents: credit thief, selfish, betrayal of trust, ill intent, information fishing, not supportive, provocative, antisocial behaviours, hypocrisy, envy and neutral emotions. Definitions for these antecedents are presented in table 3.5.

Table 3.5: Definitions for manifestations of lack of benevolence within a Jordanian context

| #  | Antecedent            | Definition  |
|----|-----------------------|---|
| 1  | Credit thief          | The distrusted stealing the efforts of the distruster and attempting to take the credit for these efforts.  |
| 2  | Selfish               | The distrusted being mostly motivated by satisfying his/her self-interests and exploiting others.   |
| 3  | Betrayal of trust     | The distrusted betraying the trust of the distruster by divulging the distruster's secrets or private information to others.  |
| 4  | Ill intent            | The distruster displaying ill intentions towards the distruster and lying to cause harm to the distruster.  |
| 5  | Information fishing   | The distrusted collecting information about the distruster to harm the distruster.  |
| 6  | Not supportive        | The distrusted not helping the distruster in work situations when needed.   |
| 7  | Provocative           | The distrusted attempting on a regular basis to irritate and provoke a negative reaction from the distruster.   |
| 8  | Antisocial behaviours | The distrusted exhibits antisocial behaviours in terms of provoking others, showing dislike of others, deceitful behaviours, immature behaviours, unkindness to others and lack of ethical conduct, criticising others' performance, not respecting others' opinions and taking credit for other efforts. |
| 9  | Hypocrisy             | The distrusted is a hypocrite and at times it's hard to decide if he/she is with or against the distruster.   |
| 10 | Envy                  | The distrusted is malevolent in terms of being envious and jealous of the success of the distruster.  |
| 11 | Neutral emotions      | The distrusted and distruster neither like nor hate each other.   |

The following quotes illustrate some of these antecedents:

*“Yes, I was tasked with doing work for the university, and this work was done by me from A to Z, so I discovered later that this person is attributing something's to him personally, so this is like they say in slang ‘climbing on a person's back’.” (Jordanian interviewee 8)*

*“I gave him my trust, I gave him a piece of information concerning my financial situation and I didn't want anyone else to know this information, meaning of course this thing I consider to be something sensitive, so I do not like anyone to know about it. So*

*he listened to the piece of information and kept it. And after two or three days I felt that the entire department knows that information and is talking about it. So I discovered that it is necessary I become more careful when I build my trust in this person, and already I mitigated my relationship with this person” (Jordanian interviewee 17)*

*“This person has some form of hypocrisy, in my face she says ‘oh my love’ and behind my back she causes problems to me, she does not have honesty in dealings with others. Furthermore, there is not love or hate between me and her, but the nature of work is what makes us talk to each other.... ” (Jordanian interviewee 3)*

### **3.2.2.3 How Jordanian Employees View Ability**

Table 3.2 shows that 7 trust antecedents were categorised under ability. Three of which were also classified under ‘Benevolence’ (i.e. support in personal situations, support in work situations, and support in general). In addition to these three antecedents, Jordanian employees viewed ability through the following four antecedents: ‘Capability’, which refers to the trustee showing seriousness at work and succeeding in performing work duties and demonstrating high levels of capability in his/her job in terms of performance, experience, sincerity, seriousness, commitment, organisation, diligence, vitality and devotion. ‘Probity in work’, which refers to the trustee conducting his/her job without stealing or cheating and being trusted to do the job properly. ‘Dependability’, which refers to the trustor being able to depend on the trustee to perform certain tasks at work, and finally, ‘Educated’, refers to the trustee being well educated and an intellectual. The following quote exemplifies these antecedents:

*“Yes, for example, once I was outside the country traveling, and I depended on him to do certain things (there was a program I wanted him to complete for me), and there was communication between us using e-mails. I discovered that he was carrying out exactly what I asked him to do, and I returned and found everything is excellent 100%. So this experience was positive, and I felt that my trust in him increased.” (Jordanian interviewee 10)*

*“In the area of work, when I want to or its hard for me (pause), since his experience is more than mine, and his tenure at the job is more than mine, a lot of times I ask him about things, and he is good at work, so I benefit from him in terms of information, and he provides me with information without being stingy” (Jordanian interviewee 7)*

#### **3.2.2.4 How Jordanian Employees View Lack of Ability**

As shown in table 3.3, for Jordanian employees, the ‘Lack of Ability’ category was manifested in three antecedents; ‘Not supportive’ which was also classified under ‘Lack of Benevolence’ category. The second antecedent ‘Incapability’ refers to the distrusted exhibiting low levels of capability at the workplace in the form of bad performance, negligence, lack of initiative and dodging responsibility. As for the third antecedent, was labelled “Unattractiveness”, which refers to the distrusted lacking experience in life, being unsociable and having a bad reputation. The following quotes illustrate these antecedents:

*“Yes, she does not put herself in a position of taking the initiative, she prefers someone else takes the initiative from her so that she would not assume any responsibility.”*

*(Jordanian interviewee 11)*

*“His un-seriousness, he does not differentiate between banter and seriousness, you feel that he is not shaped by life experience, so you don’t find authorization to conduct dealings with him or depend on him. You feel he lives in isolation from others.”*

*(Jordanian interviewee 2)*

*“He is a lying man, he does not have self-confidence. Always, any work he carries out he would be afraid, he does not know how to do the work. Even if the employee working with him is working well, he will criticize him/her and make him look as the one who made the mistake, and when he goes to see the branch manager, it becomes clear that he is the one who is mistaken. Also he is not sincere in his work, and he does not know how to work, all day he only bring people from outside the company and invites them to drink tea and coffee and he does not work entirely. In the end he does not have a sense of belonging to his work entirely”* (Jordanian interviewee 6)

#### **3.2.2.5 How Jordanian Employees View Integrity**

As shown in table 3.2, integrity was viewed by Jordanian employees through the following 9 antecedents of trust, two of which, sincerity and secret keeping, were again also grouped under ‘Benevolence’. In addition, ‘probity in work’ was also classified under the ‘Ability’ category. The remaining six antecedents representing indigenous manifestations of integrity within a Jordanian context were: upright behaviour, honesty,



acting justly, religious commitment, morality and responsibility. The definitions for these six antecedents are presented in table 3.6.

Table 3.6: Definitions for six of the manifestations of Integrity within a Jordanian context

| # | Antecedent           | Definition   |
|---|----------------------|--|
| 1 | Upright behaviour    | The trustee exhibiting honourable behaviour and refraining from deviant behaviour even when opportunity for that behaviour is present. |
| 2 | Honesty              | The trustee being honest with the trustor.   |
| 3 | Acting Justly        | The trustee being just in dealings with others at work.  |
| 4 | Religious commitment | The trustee being committed in performing and carrying out his/her religious obligations.  |
| 5 | Morality             | The trustee adherence to sound ethical values.   |
| 6 | Responsibility       | The trustee assuming the responsibility for his/her opinions and actions at work.  |

These quotes illustrate some of the antecedents under this category:

*“First, he is religiously committed, he is a nice person, he maintains his prayers. Secondly, his ethics are high, and I love to deal with any person who has high morals. I mean, to be frank, ethics are important to me” (Jordanian interviewee 7)*

*“Honesty, meaning, when he talks to me and with others, he talks honestly” ... “a second thing, he defends his opinion, and takes responsibility for the opinion that he is holding” (Jordanian interviewee 12)*

### 3.2.2.6 How Jordanian Employees View Lack of Integrity

Similarly, as shown in table 3.3, 9 distrust antecedents represented Jordanian employees' view of the 'Lack of Integrity' category. Four of these antecedents (i.e. credit thief, betrayal of trust, antisocial behaviours and hypocrisy) were also grouped under the 'Lack of Benevolence' category. The remaining five antecedents included: 1) Incompatibility, which refers to the distrusted being difficult to deal with and not knowing how to deal in a civilized way with others; 2) Promise breaking, which refers to the distrusted not fulfilling his/her promises to the distruster; 3) Disappointing, the distrusted disappoints the distruster in situations where the distruster was expecting the support of the distrusted; 4) Gossiping, which refers to the distrusted talking about the

distruster or others behind their backs and reporting what they say to others with little accuracy; and 5) Lying, refers to the distrusted being a layer.

Some of these antecedents are illustrated in the following quotes:

*“Furthermore, I noticed that dealing with him is very difficult, meaning, you would say something and this person will not try to understand the meaning of what you are saying and will only take the negative meaning, so this is something difficult.*

*Personally, I am not from that type (I am not trying to praise myself), but for example, (Pause), of course I noticed this thing not only with me, for example, I travelled with him, so I noticed that he goes into a quarrel with any person easily, so I felt that this person has a problem with dealing with others, not just me.” (Jordanian interviewee 8)*

*“Gossiping, does not keep a secret, all he wants from you is a benefit, so he is a person who follows his interests only.” (Jordanian interviewee 15)*

*“He is not honest in what he says, he is a person with two faces, he would say to me he did something and behind my back he would have done something else. Moreover, if you confront him with what he said about you, he will accuse the source that told me what he said of lying, he always blames other people....” (Jordanian interviewee 20)*

### **3.2.2.7 How Jordanian Employees View Predictability**

As seen in table 3.2, Jordanian employees viewed the predictability category through 3 trust antecedents; ‘Keeping of secrets’ (grouped also under the categories ‘Benevolence’ and ‘Integrity’); ‘Religious commitment’ (was branded also under ‘Integrity’); and ‘Dependability’ (was also categorised under ‘Ability’).

The following quotes illustrate some of these antecedents:

*“yes, I have a co-worker, one day I lost something important of mine (personal), so I was compelled to resort to him because he is close to me at work, so I asked him to do ‘something’ (like someone would ask his/her sibling to do something for him) and to keep it between us (Keep it a secret), so Immediately he did not hesitate and he helped me with it and it still remains a secret between me and him until now.” (Jordanian interviewee 6)*

### **3.2.2.8 How Jordanian Employees View Lack of Predictability**

The main category ‘Lack of Predictability’ included 4 distrust antecedents (please refer to table 3.3), three of which were all also grouped under other categories; ‘Promise breaking’ (Lack of Integrity); Disappointing (Lack of Integrity); and ‘Betrayal of trust’ (Lack of Benevolence and Lack of Integrity). The following quote illustrates some of the antecedents manifesting ‘Predictability’:

*“Yes, an incident happened where he disappointed me with the matters that I was sure he might be with me in, I was expecting that he would be supporting me with a certain matter, then I get surprised that he disappointed me. So at this point I started to be careful from him, (I did not make him my enemy), but I started to be careful from him”*  
(Jordanian interviewee 10)

Moreover, the remaining antecedent in this category was ‘Moodiness’, which refers to the distrusted displaying mood swings at the workplace. The following quote illustrates this antecedent:

*“He is also an individual with a fluctuating mood, he might at one moment be your friend and laugh with you and so and so, and suddenly you feel he fluctuated and changed”* (Jordanian interviewee 16)

### **3.2.2.9 How Jordanian Employees View Other Antecedent Categories**

In relation to trust antecedents, table 3.2 shows that in addition to the previously discussed trust antecedent categories, four distinct antecedent categories were also identified with each including only one trust antecedent. The first category was labelled ‘General’ and included the antecedent ‘Being trusted’, which refers to the trustee being trusted by others in the organisation. This category falls in line with arguments stating that “leaders’ trust may be contagious, in that it enhances the trustworthiness perceptions of trusted employees.” (Lau and Liden, 2008, p. 1131).

The antecedent ‘Reciprocity’, which refers to the trustee trusting the trustor, was considered a distinct category since no items measuring the three trustworthiness components were found that address this antecedent. This antecedent is explained by social exchange theory. Social exchange is described as “a pattern of mutually contingent tangible and intangible exchanges” (Van Dyne and Ang, 1998, p.694).

According to Cropanzano and Mitchell (2005) reciprocity is most likely the best known exchange rule among the rules of social exchange. These statements suggest that if someone feels he/she is being trusted by another party, he/she will feel obligated to return the favour in kind and trust the trustor back.

The third category labelled 'Physical features' included the antecedent 'Physical characteristics' which refers to the trustee having tolerant and comforting facial expressions and features. This category falls in line with empirical evidence (e.g. Rehman, Nietert, Cope and Kilpatrick, 2005; Snijders and Keren, 2001) linking an individual's appearance to trust in that individual. The fourth and final category 'Identification' included the antecedent 'Common characteristics' which refers to the trustor and trustee sharing similar characteristics, moods, personalities and thoughts. The following quotes exemplify these four categories:

*"He is a person who is organized in his work, and I feel that students trust him, and they come to him as much as possible, and this is evidence that students respect his opinions and trust his opinion, and they see that it's possible to have an outcome from asking him. So this made me trust him also." (Jordanian interviewee 12)*

*"The initiative was from him, he was the one who showed me that he has trust in the things I do (my work), so as a consequence, I trusted him. There was this one time, we were in a student project (an event), so I suggested an idea, he was against this idea, but he told me at the same time, that he has trust in the things that I said. The next day he read about the idea that I suggested and found it was correct, so he told me that I was correct in what I said 100%. So before he was able to check that what I said was correct, he trusted me, even though his opinion was against my point of view. So I respected him, since he has trusted what I have said and was willing to reconsider his opinion." (Jordanian interviewee 13)*

*"There are the physical characteristics; his physiognomy would reflect tolerance (good-heartedness), smiling." (Jordanian interviewee 11)*

*"personality features that are common between me and him, For example, distinguishing between work time and banter time, his seriousness at work, his sincerity at work, his opinions and thoughts in different subject, either on work or outside work"*  
(Jordanian interviewee 2)

In relation to distrust antecedents, table 3.3 shows that distrust in a co-worker was also influenced by the following four distinct antecedent categories: ‘Non Reciprocity (of favours)’, ‘General’, ‘Lack of identification’ and ‘Reciprocity of distrust’

The first category, ‘Non reciprocity’ included the antecedent ‘Non reciprocity of favours’ which refers to the distrusted failing to return services and favours provided by the distruster or even harming the distruster. The following quote exemplifies this antecedent category:

*“I used to work at the ‘transactions’ department, and I used to service people from high and low classes. So this co-worker of mine, his thing was that wherever there is a good looking girl he would try to help her finish her transaction quickly and he would ask us to help him do that (within the boundaries of the law). So I used to help him a lot in that matter, but what I discovered is that he did not appreciate this help, I used to get surprised by him going and talking about me to others, if I asked him for something, I would get surprised that he does not help me. So I provide you with services a lot, why act with me in an opposite manner?!!.” (Jordanian interviewee 7)*

The antecedent ‘Being distrusted’ which refers to being distrusted by others in the workplace was classified under the main category ‘General’. This antecedent is illustrated in the following quote:

*“Yes, of course, when I was working with him in the department, our branch manager came and transferred us to another department, when the manager transferred us to another place, this co-worker started telling the branch manager that ‘this person went out’ and ‘that person went out’ of the department, and so and so. Whenever I go to do something, he would start saying that I did this and I lost that, and say things that are outside the scope of formal work (saying things that are bad and harmful a little bit). Meaning he is a gossip (he hears something from me and takes it to other parties, but in a different way) ..... and it’s not only me, even with his other co-workers, they stopped trusting him, this co-worker stopped being trusted, and everyone started to be afraid of him.” (Jordanian interviewee 6)*

The third category is ‘Lack of Identification’ which included only one antecedent ‘Uncommon characteristics’, which refers to the distrusted and the distruster differing in their personalities and interests. The following quote illustrates this antecedent:

*“My personality is different from his personality. For example, I do not smoke, he does, I do not drink alcohol, he does, so there are uncommon characteristics between me and him and they are increasing. He is raised in a certain way that is different from the way I am raised in. So these characteristics are preventing me from trusting him once again.” (Jordanian interviewee 17)*

Finally, ‘Reciprocity of distrust’ which refers to the distrusted being distrustful of others was identified under the category ‘Reciprocity’. The following quote illustrates this antecedent:

*“... she seems like a good person, but it seems that some things happened to her that made her feel that it necessary to not trust anyone or not like anyone” (Jordanian interviewee 3)*

#### **3.2.2.10 The Impact of Antecedent Categories on Trust and Distrust Development**

In relation to the development of co-worker trust, inspection of the frequencies reported in table 3.2 show that for this Jordanian sample, the development of trust in a co-worker is mainly determined by antecedents that reflect the ‘Benevolence’, ‘Ability’ and ‘Integrity’ categories. Remaining categories (‘Predictability’, ‘General’, ‘Physical features’, ‘Identification’ and ‘Reciprocity’) played a relatively minor role when compared to that played by the three trustworthiness categories in determining trust in a co-worker. The category that was most influential in forming trust in a co-worker was ‘Benevolence’, antecedents in this category were collectively mentioned 24 times in the reported critical incidents and 33 times in the explicit responses provided by Jordanian employees (Please refer to table 3.2). The category ‘Ability’ was also influential in developing trust in a co-worker; antecedents that reflect this category were cited 14 times by the interviewees when reporting their critical incidents and 27 times when providing their explicit responses. As for antecedents manifesting the ‘Integrity’ category, they were mentioned 6 times in critical incidents and 30 times in respondents’ explicit responses.

Frequencies for the other categories were as follows: in critical incidents, the antecedent labelled under the ‘Predictability’ category was mentioned only once, however, in explicit responses, this category included antecedents that were collectively mentioned 10 times. Similarly, the antecedent categorised under the category ‘Reciprocity’ was

mentioned once in critical incidents while in explicit responses it was mentioned 4 times. Finally, the remaining categories appeared only in explicit responses, the antecedent 'Common characteristics' (Identification) was mentioned 5 times; the antecedent physical characteristics (physical features) and the antecedent 'Being trusted' (General) were each mentioned once in the interviews.

As for the development of distrust in co-worker, the examination of the frequencies from critical incidents reported in table 3.3 shows that the formation of distrust in a co-worker is dominated equally by antecedents that reflect 'Lack of benevolence' and 'Lack of integrity' which were each mentioned 15 times in interviews. Similarly, the 'Lack of predictability' and 'Lack of ability' categories had an equal impact on the formation of distrust in a co-worker, though with weaker impact than that of 'Lack of benevolence' and 'Lack of integrity'. The set of antecedents representing the 'Lack of predictability' category were mentioned 5 times in interviews, this also applies to the set of antecedents representing the 'Lack of ability' category. As for the categories 'Non Reciprocity' (mentioned 3 times in interviews) and 'General' (mentioned once in interviews), their role in the formation of distrust was the weakest of the five categories.

Moreover, the examination of the frequencies from explicit responses reported in table 3.3 shows once again that the formation of distrust in a co-worker is mostly dominated by two main antecedent categories 'Lack of benevolence' and 'Lack of integrity'. The content analysis based on critical incidents for distrust showed that 'Lack of Benevolence' and 'Lack of Integrity' had an equal impact on distrust formation. Antecedents fitting the 'Lack of Benevolence' category were more influential, mentioned 26 times in interviews, to the development of co-worker distrust than the set of antecedents grouped under the 'Lack of Integrity' category, since antecedents fitting the 'Lack of Integrity' category were mentioned only 23 times.

Antecedents grouped under the 'Lack of Ability' were also influential in co-worker distrust formation (mentioned 11 times in interviews), followed by antecedents under the 'Lack of Predictability' category (mentioned 5 times). This result is also different than that reached from analysis of critical incidents for distrust which showed that 'Lack of ability' and 'Lack of predictability' had an equal impact on distrust formation. Yet in both content analyses for distrust, these two categories had less influence than 'Lack of Benevolence' and 'Lack of Integrity'. Finally, for the categories 'Reciprocity'

(mentioned once in interviews) and 'Lack of Identification' (mentioned twice in interviews), their role in the formation of co-worker distrust was the weakest.

### **3.3 Summary**

This chapter reported the findings of a qualitative inquiry concerned with describing Jordanian employees' conceptualisations of interpersonal trust within the context of co-worker relationships and identifying the determinants of their trust or distrust in their co-workers. This chapter also explored how Jordanian employees view these trust and distrust antecedents, that is, how the trustworthiness components manifest within the context of Jordanian organisations. What these findings mean and how they compare to the conceptualisations and frameworks of trust in extant literature is discussed in the following chapter. The following chapter also addresses the limitations and future research directions of this qualitative study whereas the theoretical and practical implications of this study will be discussed later in chapter eight alongside the implications of the second study reported in this thesis.



## **CHAPTER FOUR**

### **Discussion of Qualitative Study Results**

#### **4.1 Introduction**

This qualitative study examined trust relationships between co-workers in Jordan using a cross-sectional design. The primary aim was to test the validity, within this setting, of existing trust and trustworthiness measures, which have for the most part been developed in the US or other western and ‘individualistic’ environments. In contrast, Jordan is a country where previous research (e.g. Alkailani et al., 2012) indicates the predominance of collectivist norms and values in its culture.

The study found that two elements were present in the conceptualization of trust as experienced by employees in Jordanian organisation, namely the willingness to be vulnerable and positive expectations of the trustees’ future behaviours. In relation to antecedents of trust, the perceived trustworthiness components of ability, benevolence and integrity of a co-worker were found to be the most noticeable determinants of co-worker trust. As for determinants of distrust in a co-worker, the most prominent antecedents were the lack of perceived ability, benevolence and integrity of a co-worker were the most prominent.

In the following sections, the findings of this study are presented and discussed within three areas; the nature of trust, antecedents of trust and antecedents of distrust. The chapter ends with two sections; one on limitations and future research and the other on conclusions.

#### **4.2 Nature of Trust**

The study first examined how trust is defined and viewed by employees working in Jordanian organisations in comparison with how it is defined in existing operationalizations of trust. The findings show that the central themes in the Jordanian employees’ definitions of trust are essentially the same as those identified in existing

conceptualisations of interpersonal trust (e.g. Dietz and Den Hartog, 2006; Rousseau et al., 1998; Mayer et al., 1995); namely, 'willingness to be vulnerable' and 'positive expectations', with the first element being more prominent than the latter. To a lesser extent, trust in the minds of some of these employees was also found to reflect the two trust dimensions of cognition-based and affect-based trust, which correspond with McAllister's (1995) view of interpersonal trust.

As noted in chapter one, in Mayer et al.'s (1995) trust model, trust is defined by these authors as willingness to be vulnerable to another party based on the expectation that this other party will perform an action important to the trustor. As shown in chapter three, the results in relation to how Jordanian employees define trust show that these two elements (willingness to be vulnerable and positive expectations) are present themes in Jordanian employees' definitions of trust. Manifestations of Jordanian employees' view of the 'willingness to be vulnerable' element of trust included comfortableness, reassurance, safeness, disclosure, openness and carelessness, all of which represent states in which the trustor is more willing to deal with and be vulnerable to the risk inherent in the relationship with the trustee. According to Mayer et al. (1995) trust is to be willing to take risk. Moreover, results reported in chapter three show that Jordanian employees appear to have a number of positive expectations (regarding the trustee) which represent the bases of their trust in another; keeping of secrets, absence of ill intentions, concern, dedication, respect, sincerity and no exploitation. These conditions provide a representation of what Mayer et al. (1995) referred to in their trust definition as an expectation that the trustee will exhibit acts that are important to the trustor. Thus, these results indicate that Mayer et al.'s (1995) definition of trust is applicable to the Jordanian context.

A number of researchers (e.g. McEvily and Tortoriello, 2011; Noorderhaven, 1999) have raised the question whether the concept of trust is viewed in the same way by individuals across different countries and cultures. The study's findings broadly support the view that the conceptualizations of trust proposed in current trust literature (notably Mayer et al.'s definition of trust) are applicable to the Jordanian context, which is typified as collectivist. This points to the suitability of using scales designed to measure 'willingness to be vulnerable' and 'positive expectations' in studies of trust relationships in Jordan and possibly elsewhere.

### **4.3 Antecedents of Trust and How They are Viewed by Jordanian Employees**

The second research question was concerned with investigating the antecedents of co-worker trust in Jordanian organisations and comparing them with those identified in existing frameworks of trust and exploring how Jordanian employees view these antecedents. The findings again broadly showed that within the cultural context in which Jordanian organisations operate, antecedents of co-worker trust were similar to those of existing frameworks (e.g. Mayer et al., 1995). Analysis of the reported critical incidents and of the explicit responses of Jordanian employees both revealed that trust was predominantly developed based on perceptions of the co-worker's ability, benevolence and integrity. The findings extend the range of cultures, including China (Wasti et al., 2011), in which the three trustworthiness components have been found to be critical in building trust between peers.

As noted in chapter one, in their theoretical paper, Mayer et al. (1995) proposed only three antecedents of trust; ability, benevolence and integrity. The results of this study show that Jordanian employees' trust in a co-worker is mainly based on perceptions of the trustee's ability, benevolence and integrity. Thus, the trust antecedents proposed by Mayer et al.'s (1995) model are applicable to the Jordanian context. However, as will be discussed next in this section, the study findings also identified other antecedents to co-worker trust within the Jordanian context that extend beyond those proposed by Mayer et al.'s (1995) model and even though these antecedents can be found in other trust literature developed in the west, nonetheless a number of them were not found in the trust literature developed in non-western countries as discussed later in this chapter.

In relation to the findings of this study that trust is based on perceptions of the trustee's ability, benevolence and integrity, these findings are the same as those reported in previous cross-cultural trust research. As noted in the literature review section in chapter one, Tan and Chee (2005) and Wasti et al. (2011) both empirically found in their respective qualitative studies within non-western countries that trust is predicted by perceptions of the trustee's ability, benevolence and integrity. However, a single country quantitative study (i.e. Singapore) by Tan and Lim (2009) found only benevolence and integrity to be significant predictors of co-worker trust.

Five distinct antecedents were also identified (as noted earlier, these were not included in Mayer et al.'s trust model), namely; predictability, identification, reciprocity, general category (i.e. being trusted by others) and physical features. However, their contributions to the development of co-worker trust were minor compared to those of the three trustworthiness components.

Dietz and Den Hartog (2006) defined predictability as specifically relating to regularity and consistency of behaviour and considered it one of the four most salient trustee attributes for assessing a trustee's trustworthiness. In comparison, most other previous research (e.g. Knoll and Gill, 2011; Wasti et al., 2011; Tan and Lim, 2009) focuses on ability, benevolence and integrity while excluding predictability as a trustworthiness component. In the current study, predictability emerged as a moderately important antecedent (mentioned once in critical incident reports and ten times in explicit responses). These findings may highlight a potentially stronger role for predictability as an antecedent of trust within the context of collectivist cultures.

Another antecedent that emerged was reciprocity (mentioned once in critical incident reports and four times in explicit responses). The term 'reciprocity' in this study was used as a label for when the employee trusts the trustee in order to reciprocate the trust that the trustee has displayed towards him/her. This finding is in line with that of Wasti et al. (2011) within organisations that operated in collectivist cultures (Turkey and China), possibly providing further evidence of the role of reciprocity in the development of trust relations in collectivist cultures. Wasti et al. (2011) referred to reciprocity in their study as the trustee showing willingness to be vulnerable to towards the trustor (i.e. trusting the trustor), and the trustor reciprocating by trusting back.

A third antecedent was Identification (mentioned five times in explicit responses of employees). Identification in this study was used to include antecedents that refer to the sharing of similar characteristics, moods, personalities and thoughts by trustors and trustees. In their qualitative study, Wasti et al. (2011) reported a similar antecedent for trust in supervisor (yet, not trust in peer) which they labelled 'common values' to refer to the shared values, interests and lifestyles between both parties in the trust relationship. One possible explanation for the emergence of Identification as an antecedent of co-worker trust in the current study is offered by the theories of social identity and self-categorisation (Turner, 1991; Tajfel and Turner, 1979). Tajfel and

Turner (1979) note that categorising one's self to a certain group leads to favouritism (both in evaluations and behaviour) of in-group members and discrimination against out-group members.

Two further antecedents were identified, though both were mentioned only once in the explicit responses of employees. First was the category labelled 'general' that included 'being trusted by others', referring to the trustee being trusted by others in the organisation. This is in line with Lau and Liden (2008) who found in a study in the US that an employee was likely to place more trust in a co-worker who was also trusted by the leader than in a co-worker who was less trusted by the leader. Lastly, physical features in terms of comforting facial expressions were identified as an antecedent: a finding that is in line with previous research findings in the medical arena and laboratory experiments in western countries (e.g. Rehman et al., 2005; Snijders and Keren, 2001).

With the exception of reciprocity and identification, the remaining three trust antecedents (i.e. predictability, general category/being trusted by others in the organisation and physical features) were not identified as antecedents of trust in the trust literature conducted within non-western and collectivist cultures. In relation to predictability, Tan and Chee (2005) did not identify any trustworthiness antecedents that can be categorised under predictability while Wasti et al. (2011) did not identify any antecedents that can be meaningfully distinguished under the predictability category. Similarly, the trustee being trusted by others and his/her physical features were not identified as trust antecedents in Tan and Chee's (2005) and Wasti et al.'s (2011) studies.

Furthermore, when comparing the localised manifestations of ability, benevolence and integrity identified and reported in this study with those reported in previous cross cultural trust research, a number of common manifestations can be identified in addition to identifying a number of possible emic manifestations of these three trustworthiness factors that are unique to the Jordanian context. As noted in chapter one, qualitative cross-cultural studies examining the impact of the three trustworthiness factors on trust and examining the indigenous manifestations of trustworthiness factors are relatively few. Two studies were reported in the literature review in chapter one. Namely; Tan and Chee (2005) single country study and Wasti et al. (2011) study in Turkey and China.

As reported in chapter three, Jordanian employees viewed the ability of the trustee through the following manifestations: support in personal situations, support in work situations and support in general, capability, probity in work, dependability and being educated. With only two exceptions, all of these manifestations were reported in previous trust research within non-western cultures. For example, the antecedents identified in this study capability, dependability include and are similar to those identified by Tan and Chee (2005); competence, good work performance and dependability. Furthermore, the antecedents support in personal situations and work situations and capability identified in this study are similar to those identified by Wasti et al. (2011) who identified two ability antecedents; support (which they define as providing guidance to the trustor to develop and grow and to solve problems in addition to providing encouragement) and capability (which they define as the trustee having work related ability in terms of decision making and execution in addition to experience and success). However, two antecedents (i.e. probity in work and the trustee being educated) categorised under ability were not identified in this previous research and thus are possibly unique to Jordan.

As for benevolence, it was viewed by Jordanian employees through the following manifestations: concern, sincerity, support in personal situations and support in work situations, protection, keeping of secrets, empathy, consideration, intimacy, kindness, understanding, loyalty, good intentions and support in general. With only four exceptions, all of these manifestations were also common in other collectivist cultures. For example, support in personal and work situations correspond to the antecedent 'support' identified by Wasti et al.'s (2011) and the antecedent 'mutual help' identified by Tan and Chee (2005) which they defined as providing help and assistance that is beyond the work role. The antecedents 'protection' and 'concern' are similar to Wasti et al.'s (2011) 'protection' and 'unselfish behaviour' respectively. The antecedents, 'Sincerity' and 'Kindness' were also reflected in Wasti et al.'s (2011) antecedent labelled 'Affability' which they defined as the trustee being kind and sincere and able to relate to others. Finally, the antecedents 'Empathy', 'Intimacy' and 'Understanding' were also closely similar to those identified by Wasti et al. (2011) as 'Sympathy' 'Intimacy' and 'Understanding' respectively.

However, four antecedents (i.e. keeping of secrets, loyalty, consideration and good intentions) under this category were unique to the Jordanian context.

Finally, Jordanian employees' view of the trustee's integrity manifested through the following antecedents: sincerity, secret keeping, probity in work, upright behaviour, honesty, acting justly, religious commitment, morality and responsibility. With the exception of three antecedents, all of these integrity manifestations have been identified in research conducted within collectivist cultures. For example, in relation to the antecedents 'Sincerity', 'Loyalty' and 'Keeping of secrets', Tan and Chee (2005) identified three similar antecedents labelled 'Sincerity', 'Loyalty' and 'Discreetness' respectively. The antecedent 'honesty' was also identified in Tan and Chee's (2005) study under the same label. The antecedent 'Acting justly' corresponds to the antecedent 'Fairness' identified in both Tan and Chee's (2005) and Wasti et al.'s (2011) studies. The antecedent 'Responsibility' is similar to the antecedent 'Reliability' in Wasti et al.'s (2011) study and which according to these authors involves correcting for mistakes. Finally, the antecedent 'Probity in work' paralleled the antecedent 'Being responsible' in Wasti et al.'s (2011) study. According to Wasti et al.'s (2011), 'Being responsible' means that the trustee can be relied on for successfully completing a task.

However, three integrity manifestations (i.e. Upright behaviour, Religious commitment and Morality) were not identified in these previous studies and thus are considered as possible emic manifestations of integrity that are unique to Jordan.

In relation to the relative importance of the three trustworthiness factors, both the reported critical incidents and the explicit responses of the Jordanian employees showed that the perceived benevolence of the co-worker was the most salient of the three. This is similar to the findings of Wasti et al. (2011) and the predictions of Doney et al. (1998) in relation to the impact of cultural dimensions (e.g. collectivism vs individualism) on the relative importance of trustworthiness factors (discussed in chapter 3). Doney et al. (1998) argue that there are five different processes (calculative, prediction, intentionality, capability and transference) trustors may use to develop trust in a referent and that cultural factors either facilitate or inhibit the application of a particular process. Jordan scored low on the dimension 'individualism' (Alkailani et al., 2012) indicating the prevalence of collectivist norms and values. And according to Doney et al. (1998) individuals in collectivist cultures are more likely to establish trust via an intentionality process which entails that the trustor must determine that a referent's intentions in an exchange are benevolent. Thus, the finding that benevolence is the most salient factor to trust development within the Jordanian organisations that

participated in this study indicates that the intentionality process is used by Jordanian employees to establish trust in another more than the other four processes also proposed by Doney et al. (1998).

These findings also indicate the use of some of the other four trust building processes but to a lesser extent. For example, the emergence of predictability as an antecedent to trust indicates the use of a prediction process where “the trustor confers trust based on prior experiences demonstrating that the target’s behavior is predictable” (Doney et al., 1998, p.605).

These results (in relation to the relative importance of trustworthiness factors) are also similar to and support those reported in previous research in non-western countries. Tan and Chee (2005) found that affective factors of trustworthiness (which are similar to benevolence as depicted by Mayer et al.’s, 1995 model) are more important within a Confucian society for trust development than cognitive factors of trustworthiness (which are similar to ability as depicted by Mayer et al.’s, 1995 model). Similarly, Wasti et al. (2011) found that trust development within the professional domain was mostly benevolence driven Turkish sample while in the personal domain, for both the Turkish and Chinese samples, trust development was primarily based on benevolence perceptions.

Finally, the findings in relation to the impact of the three trustworthiness factors on the development of trust in a co-worker and the relative importance of these trustworthiness factors for the prediction of trust provide further empirical evidence to support the development of some of the proposed hypotheses in chapter one, namely; H1, H2, H3 and H8.

#### **4.4 Antecedents of Distrust (Not Trusting) and How They are Viewed by Jordanian Employees**

The final research question aimed to examine the antecedents of distrust in co-workers within Jordanian organisations and compare them with those identified in the trust literature and explore how Jordanian employees view these antecedents. Both the critical incidents and explicit responses of Jordanian employees showed that lack of benevolence, lack of integrity, lack of ability and lack of predictability were all influential in the development of distrust in a co-worker. For example, as reported in



chapter three, the distrust antecedents (i.e. credit thief, selfish, betrayal of trust, ill intent, information fishing, not supportive, provocative, antisocial behaviours, hypocrisy, envy and neutral emotions) were all viewed by Jordanian employees as indicators of the trustee's lack of benevolence. As for lack of ability, it manifested within the Jordanian context through the trustee being perceived as not supportive, showing incapability and exhibiting unattractiveness. Furthermore, lack of integrity was viewed by Jordanian employees through the following manifestations: credit thief, betrayal of trust, antisocial behaviours, hypocrisy, incompatibility, promise breaking, disappointing, gossiping and lying. Finally, lack of predictability included the following antecedents: promise breaking, disappointing, betrayal of trust and moodiness. This finding provides empirical support for the assumption in mainstream literature that distrust and trust develop from beliefs about the other party's trustworthiness (Conchie et al., 2011).

In terms of the relative importance of trustworthiness factors, findings derived from the critical incidents were not consistent with those from the explicit responses in terms of rank order. However, in both analyses, lack of benevolence and lack of integrity were more salient to the development of distrust in co-workers than lack of ability and lack of predictability, offering indirect support to Doney et al. (1998).

Some of the less significant determinants of trust discussed in the previous section also emerged as determinants of distrust. Specifically, non-reciprocity of the distruster's services and favours, reciprocity of distrust displayed by the distrusted employee, being distrusted by others in the organisation and finally, lack of identification with the distrusted employee all emerged as determinants of distrust. However, their contribution to the development of distrust was also minor compared to that made by the trustworthiness factors.

#### **4.5 What is Uniquely Jordanian about the Findings**

And how they add to the already available work on trust (the strong presence of benevolence, some emic or localised manifestations of ABI+ such as physical features and religious adherence and the dominance of benevolence could be emphasised more in the thesis

A number of the findings discussed earlier might be unique to the Jordanian context in particular and/or to collectivist contexts (e.g. some Arabic and Asian cultures) in general.

First, in terms of the findings indicating a dominant role of benevolence for the development of co-worker trust, the Jordanian context in addition to some other collectivist contexts such as Turkey and China (Wasti et al., 2011) or a Chinese Confucian society (Tan and Chee's (2005) are uniquely different from western countries in terms of the predominant role of benevolence in developing co-worker trust. This finding is unique to collectivist cultures because the view common in the western trust literature on how trust develops which is based on McAllister's (1995) proposition, posits that cognitive based trust is a precursor for the development of affective based trust. Thus, indicating that perceptions of the trustee's ability are more prominent for the development of trust than perceptions of the trustee's benevolence. The finding reported in this study provides further empirical support to the notion that in collectivist cultures, benevolence will play a prominent role in the development of trust within work relationships.

In terms of trust antecedent categories, three antecedents (i.e. predictability, being trusted by others in the organisation and physical features) appear to represent some of the possible emic/unique manifestations of trust antecedents that are identified within a Jordanian context yet not within the Turkish and Chinese contexts (Wasti et al., 2011) or a Chinese Confucian context (Tan and Chee's (2005). However, as noted and discussed earlier, these three antecedents can be found in the western trust literature, thus, these antecedents are potentially uniquely Jordanian only within the boundaries of collectivist cultures. These findings add to the available work on trust by identifying some trust antecedents that were not previously identified within collectivist contexts, however, were identified in individualistic-western contexts.

In terms of emic manifestations of the three trustworthiness factors (i.e. ability, benevolence, integrity) that are unique to the Jordanian context, a number of these manifestations have been identified in this study. These emic antecedents include: probity in work and the trustee being educated (for the ability category), keeping of secrets, loyalty, consideration and good intentions (for the benevolence category) and upright behaviour, religious commitment and morality (for the integrity category).

These trustworthiness manifestations were not identified in the previous research conducted within collectivist cultures. Thus, these findings add to the existing literature on trust by identifying new manifestations for these trustworthiness factors within collectivist cultures.

#### **4.6 The Debate on the Etic vs Emic Nature of Trust and Dietz vs Bachmann**

Findings in relation to the conceptualisation of trust in Jordan and the antecedents of trust in Jordan provide empirical support to the argument provided by Dietz (2011) in response to the propositions provided by Bachmann (2011) in the Journal of Trust Research (please refer to chapter one section 1.1.3.1.1 for a summary of the debate between Bachmann, 2011 and Dietz, 2011 in the Journal of Trust Research). As discussed earlier, the findings of this qualitative study show that trust for Jordanian employees is conceptualised as both a 'willingness to be vulnerable' to the trustee in addition to 'positive expectations' of the trustee's future behaviours and that view of trust is similar to the way trust is conceptualised in western contexts. Moreover, the findings of this study showed that the three trustworthiness factors of ability, benevolence and integrity were the most important antecedents for developing trust in a co-worker thus also supporting the western view of trust development (e.g. Mayer et al., 1995). Given that this study was carried out in Jordan (a context different from that in western countries), these findings provide some support to Dietz (2011) argument that trust is developed based on a universal dynamic/sequence that applies to all trust encounters regardless of the country, sector and relationship within which this encounter resides.

The findings of this study also showed the absence of any antecedents representing the role played by institutions (e.g. institutional rules and policies) in trust development. This provides support to Dietz's (2011) argument that Bachmann (2011) overstates the role played by institution in the development of trust and that in most contexts interactional evidence is likely to eclipse institutional evidence because individuals tend to prefer evidence from their own eyes through direct encounters. That is, these findings suggest a more important role played by interactional sources of evidence (e.g. the trustee trustworthiness) for the development of trust compared to that played by institutional sources of evidence (e.g. institutional arrangements).

The findings of this study showing similarities between the Jordanian context and the Western context in terms of how trust is conceptualised and developed while also showing some few differences in terms of how Jordanian employees view the trustworthiness antecedents compared to how they are manifested in other cultures provide some support to the view adopted by Ferrin and Gillespie's (2010) and Dietz (2011) that trust is a universal variform where the trust dynamic is universal while some manifestations of this dynamic (i.e. trustworthiness factors) will vary across cultures.

#### **4.7 Limitations and Future Research**

Future research needs to address a number of limitations. Despite the contribution of the current research there remains a scarcity of studies examining the conceptualisation of interpersonal trust and the antecedents of distrust within the context of Jordanian organisations or in collectivist cultures. Further replication in Jordanian organisations or in countries that have a collectivist culture is required.

Another limitation relates to the representativeness of the sample and the external validity of findings. Although the sample was drawn from a number of industries to improve the generalizability of findings to more than one organisational setting, it was not representative of all employees in Jordan, since it was drawn only from organisations located in the capital Amman. The sample size was also at the minimum recommended size for grounded theory studies (20 participants). Future research should attempt to replicate these findings using larger samples that are drawn from geographically separated organisations and if possible from different countries with collectivist cultures to improve the generalizability of findings.

One limitation of this study is related to the use of priori codes/categories (i.e. elements of trust definitions and categories for trust antecedents that are available in the trust literature and available in theoretical models of trust) to guide the coding process. According to Creswell (2007) using prefigured codes from theoretical models/the literature can limit the analysis to these pre-existing codes instead of opening up the codes to reflect the views of interviewees. Thus, the use of the elements present in trust definitions (noted by trust researchers) and the categories of antecedents presented in Mayer et al.'s (1995) trust model as a guide for coding the interview data may have biased the results in the sense that it may have limited the analysis to these codes and prevented the identification of new antecedent categories during the analysis.

Furthermore, the first coder's (i.e. the researcher) prior knowledge about these pre-existing codes may have led the researcher to pre-judge the coding of the interviews and affected the way he looked at the interview data when coding it. To counter this potential for bias as much as possible, the first coder (i.e. the researcher) followed the same instruction followed by the second coder. That is, to identify all he can in terms of themes and antecedents in interviewee responses. This required from the researcher to not limit his coding of the data to any prior knowledge he has of priori codes and instead to look for additional codes that might emerge from the data. Furthermore, to also counter this potential bias, another coder was asked to code the interview data separately from the first coder. As described in the methods chapter for this study (chapter two), in the beginning of the analysis process, the interview data was coded separately by two coders and even though the first coder (i.e. the researcher) had prior knowledge of these pre-existing codes (which may affected his coding process), the second coder did not have any prior knowledge of these priori codes.

In addition, to ensure that the second coder conduct the coding without any prior knowledge of the pre-existing codes, the researcher made sure that this coder was studying a different discipline than that of the researcher and no instructions were given to this coder to look for certain elements/antecedents in the responses (that is, no information were given to this coder on pre-existing codes), instead, this coder was only instructed to list all that he can identify in terms of themes present in responses about trust definitions and antecedents stated or implied in an interviewee's responses for questions exploring the antecedents of trust in a co-worker. Thus, this procedure (i.e. the use of a second coder with no prior knowledge of the codes) was followed in order to limit (as much as possible) any effects of the researcher having prior knowledge of these codes on him pre-judging the coding of the interview data. Initially, the researcher wanted to find two Arabic speaking coders (other than himself) to code the interview data, however, only one was willing and available at the time.

It should also be noted that the first stage (noted earlier) of coding the interview data (which consisted of the two coders separately coding the data and then meeting to discuss the lists of themes and antecedents each produced and agree on unified lists) was not based on pre-existing codes or categories (at least for the second coder), the coding of the data according to pre-existing codes was officially done by the researcher in a later stage of the analysis (see chapter two). This procedure was necessitated by the

objectives of the qualitative study (noted in chapter one) which were to compare the Jordanian employees' conceptualisations and antecedents of trust to those identified in western models of trust (i.e. the Mayer et al.'s trust model) and one way to do that was to see if the lists of themes and antecedents agreed upon by the two coders in the first stage of analysis fell into the pre-existing categories or codes that can be identified in the western literature on trust.

In terms of recommendations for future research using this same approach of analysing the data (i.e. using priori or pre-existing codes), Creswell (2007, p.152) "encourage the researchers to be open to additional codes emerging during the analysis". Furthermore, future researchers should seek to recruit more than one coder with no prior knowledge of pre-existing codes and attempt to distance themselves from the coding process as much as their resources, circumstances and research requirements may allow so that their prior knowledge of pre-existing codes will not have any influence on the coding process.

Other concerns may relate to the use of qualitative methods, though Lewicki et al. (2006) view them as having high external validity and to the internal validity of results. Future research should attempt to triangulate qualitative findings with survey data to improve internal validity. As discussed in chapter two, this thesis attempts to overcome threats to validity by triangulating some of these findings with findings derived from survey data.

Given that this is part of a PhD thesis, there were time and resources limitations that limited the scope of the study and the ability to conduct interviews with a larger number of participants. Future research could also examine the antecedents of trust in other trust referents, possibly within collectivist cultures. Finally, future quantitative research can capitalize on findings regarding the role of predictability, identification and reciprocity in the development of trust in co-workers.

## **4.8 Summary**

The first study presented in this thesis reported the results of a qualitative investigation of the nature of trust and the determinants of co-worker trust and distrust in the context of Jordanian organisations operating within a collectivist culture. The study found that

employees working in Jordanian organisations viewed and defined interpersonal trust in terms of having the willingness to be vulnerable to the trustee and having positive expectations of the trustee's future actions. This conceptualization of trust is in line with what is proposed by most of the popular conceptualizations of trust in existing trust literature.

The findings pertaining to the antecedents of trust indicate that the determinants of co-worker trust within Jordanian organisations are in line with what is proposed by existing trust literature. Later findings pertaining to the antecedents of distrust supported the assumption that distrust (not trusting) is a result of a lack of perceived ability, benevolence and integrity of the referent.

Moreover, the findings highlighted the role of culture in determining the relative importance of trustworthiness factors in trust development. Benevolence (or lack of it) was always the most critical factor in predicting co-worker trust, and distrust, respectively in the Jordanian context.

Finally, the findings validate the use of extant trust models along with their respective measures of trust and trustworthiness for the examination of trust in the context of work relationships within Jordanian organisations, the central topic of this thesis.

As noted previously, the following three chapters are concerned with addressing research questions three to six and empirically testing the hypotheses developed in chapter one. The next chapter starts this process by providing a description of the methods and procedures used to collect quantitative data. Similar to chapter two, the following chapter will start by justifying the use of questionnaires as a data collection tool and then describing the procedures followed to gain access, recruit participant, translate and pilot test the questionnaire. The measures used in the questionnaire are also presented and ethical considerations are also addressed throughout the chapter.

## **CHAPTER FIVE**

### **Methods – Quantitative Study**

#### **5.1 Research Approach**

The study adopted a quantitative approach for the primary data collection, thus the data collection tool used was a questionnaire. Questionnaires were used for data collection because they are the most effective way of meeting the research objectives of this study which focus on examining and explaining relationships between variables. According to Saunders et al. (2009) questionnaires tend to be used for both descriptive research which focuses on identifying and describing the variability in different phenomena, and for explanatory or analytical research which focuses on examining and explaining relationships between variables such as cause and effect relationships.

Further justification for using questionnaires comes from their prior use in numerous empirical studies (e.g. Knoll and Gill, 2011; Yakovleva et al., 2010; Tan and Lim, 2009; Gill et al., 2005) that assessed the applicability of the Mayer et al's (1995) model to different referents of trust within organisations and a number of studies (e.g. Pane Haden et al., 2011; Abdul Rahim and Nasurdin, 2008; Thau et al., 2007) that examined the relationship between trust in different referents and antisocial work behaviours. Furthermore, questionnaires were also used in previous studies examining the relationship between trust in different foci and different types of organisational citizenship behaviours (e.g. Settoon and Mossholder, 2002; McAllister, 1995). In addition, according to Dietz and Den Hartog (2006) numerous measures of intra-organisational trust are available. This fact implicitly reflects the high use of questionnaires in trust research. Furthermore, keeping in mind that this study measures variables such as trust and antisocial work behaviours, the use of questionnaires in this study confirms with the views of Hartmann and Slapničar (2009) that studies into trust and justice require data collection to be anonymous because these studies are usually perceived to concern private information. It can also be argued that given the sensitive and private nature of antisocial work behaviours, it is also important to ensure anonymity for respondents. Hartmann and Slapničar (2009) additionally state that this anonymity is easily achieved by the survey method. Thus, questionnaires will provide



answers to the research questions asked and help achieve the objectives of this research, and ensure the anonymity needed for gathering more accurate data from respondents.

It should be noted that the size of the contingent employee sample (n=46) is one of the limitations of this study (discussed in the final chapter in the limitations section). According to Williams and Zimmerman (1989, p.360) one of the factors that affects the power of a test, “the probability of rejection of a null hypothesis when it is false”, is sample size. Cohen (1992) explains that a larger sample is more likely to result in rejection of a false null hypothesis than a smaller one. Similarly, Bradley and Brand (2013, p.836) note that “the recommended approach to increasing power is to increase sample size”. These statements suggest that low sample size can possibly cause the test to have insufficient power to test many of hypotheses. This may, according to Pallant (2010) possibly lead to non-significant results. In this thesis, the relatively small size of the contingent employee sample may explain the non-significance of results reached using data from this sample.

## **5.2 Participants and Procedure**

The population of which the sample of the study was drawn consisted of permanent employees and contingent employees who work or had worked alongside each other in a blended workforce within their organisations. Data were collected from organisations located in the Hashemite Kingdom of Jordan. The use of a non-Western sample adds to the originality of the study. Participants in this study were recruited from five organisations. These five organisations targeted were those with which the researcher was able to establish organisational contacts and at the same time were those that included a blended workforce either in one (e.g. one department) or more parts of the organisation. All of the organisations targeted have at least one form of contingent worker present in the workforce (e.g. trainees or interns, freelancers, and academics whose services are employed on a temporary basis). Of these five organisations, two operated in the education sector, one in the government sector, one in the telecommunication sector and one in the media sector.

The two organisations operating in the education sector consisted of two geographically separated large universities that operate using a blended workforce; this workforce consists of academic staff employed on a permanent basis working alongside other

academic staff employed on a temporary basis (e.g. one semester). The temporary academic staff delivered modules that the permanent academic staff was unable to deliver due to having a full load. The organisation operating in the government sector and the organisation operating in the telecommunication sector used a workforce that included some permanent employees in certain departments working alongside trainees/interns who worked for the organisation for periods spanning from 3 to 6 months. As for the organisation operating in the media sector, the workforce included some permanent employees in certain departments working alongside freelancers who were called upon to work for the organisation at certain periods during the year which are characterized by an increased workload (e.g. the month of Ramadan).

Before commencing the data collection process, the researcher contacted (via e-mail) the scholars who originally developed the scale-items/measures employed in the questionnaire, to ask each one of them for his/her permission to use the measure he/she developed. As a consequence, permission was kindly granted by all of those scholars.

The questionnaire was translated into the official language of Jordan (Arabic), using parallel translation, where the source questionnaire was handed to two independent translators who in turn translated the questionnaire measures from their original form in English to Arabic, the researcher then compared the two versions of the translated questionnaires to detect the presence of any differences between the two. Only few differences between the two translated versions were found. Following the comparison, the researcher arranged a meeting with the two translators to jointly discuss and resolve any differences between the two translations and to also discuss the comments the researcher had on the translations.

One of the phrases that were discussed in the meeting was the expression “will go out of his/her way to help me”. In Arabic, the lexical meaning “the precise meaning of individual words” (Saunders et al., 2009, p.383), of this expression did not reflect its idiomatic meaning “the meanings of a group of words that are natural to a native speaker and not deducible from those of the individual words” (Saunders et al., 2009, p.383) in English. Therefore, we decided to use an Arabic expression “سيتحمل المتاعب والمشقة لمساعدتي” which in English means “to bear trouble and hardship to help me” to reflect the idiomatic meaning of this expression instead of using an Arabic translation that reflects the lexical meaning of the expression.

The final version of the translated questionnaire was pilot tested before being distributed to potential participants. The organisational contacts and a small group of employees who work in the targeted organisations were handed the translated questionnaire and were each asked to complete the questionnaire and provide feedback on the clarity and relevance of the questionnaire instructions, questions and items. Furthermore, the pilot test was conducted to check if there were any items or questions the respondent felt uneasy about answering, and to determine the typical time needed to complete the questionnaire. Based on the feedback generated from the pilot testing of the translated questionnaire, few changes and additions were made to increase comprehension of the questionnaire instructions and items. Furthermore, based on comments relating to the length of the questionnaire and the time needed to complete it (which was 35-40 min), the researcher attempted to reduce (as much as possible) the time needed to complete the questionnaire by slightly rephrasing the instructions to make them more concise without affecting comprehension. Moreover, a few changes were made to the format in which the questionnaire was presented to make it appear shorter in terms of length, and to offer a more time-efficient way of responding to the questionnaire items.

Due to time and resource constraints in addition to facing difficulties in acquiring access to the top management of some of these organisations, the researcher used a snowball sampling technique to collect data from willing participants in these five organisations.

According to Saunders et al. (2009, p. 240) Snowball sampling technique “is commonly used when it is difficult to identify members of the desired population”. There are a number of factors that made it difficult for the researcher to identify members of the desired population within the organisation. First, within the organisations contacted, not all depended on a blended workforce. This ranged from use in only one department to use in ‘almost’ all or many departments; however, there were no organisations that used a blended workforce in all departments.

Second, it was hard for the researcher to identify and have access to the contingent employees, given that in most cases, they had different work arrangements than permanent employees. That is, many contingent employees were not required to stay in the organisation the same number of hours as permanent employees and thus, left the organisation almost immediately after finishing their daily work because they did not

have an office within the organisation or due to having other commitments. Also many did not have a specific time for arriving or leaving the organisation as permanent employees do (e.g. in organisations working in the education sector, contingent employees would arrive to the organisation briefly before the time of their lecture and in many cases leave immediately after it).

Third, given that the population from which the sample was drawn consisted of permanent employees working alongside contingent employees, it was difficult for the researcher to know which permanent employees within a department or organisation has worked closely alongside a contingent employee and vice-versa while also working alongside employees with the same employment status. The researcher observed that even within a blended workforce, in numerous cases there were permanent employees who did not have the opportunity to work closely alongside contingent employees and vice-versa. Thus, in order to ensure that all participants were employees who worked closely alongside an employee with a different employment status while also working alongside employees with the same employment status, it was important to contact those within the organisation (i.e. division and department heads) who could identify and distribute the questionnaires to members of the desired population within the organisation and its departments. Saunders et al. (2009) note that snowball sampling may provide the only possibility for finding cases in populations that are difficult to identify, as was the case here.

Thus, the researcher first established organisational contacts using personal and professional networks. The organisational contacts were heads of departments, divisions and branches that operated using a blended workforce. For example, in one of the educational institutions, the dean of one of the faculties was contacted, in the other educational institution, a couple of department heads were contacted, Furthermore, in one of the organisations approached, the head of human resources was contacted.

The researcher met personally with each of these organisational contacts, provided them with a copy of the information sheet and the questionnaire (both are discussed later in this chapter in more detail) and explained to each of them the purpose of the research and its role in a PhD project. The researcher also discussed with each organisational contact the ethical issues that may arise from conducting this research in their respective organisations (ethical issues are addressed throughout this chapter). For example, the

researcher ensured to each organisational contact that the name of their organisation, the name of the department(s) from which data will be collected and the identity of respondents will remain anonymous and will not be mentioned in the thesis in order to ensure the privacy and anonymity of respondents and their organisations, yet, each contact was informed that only the business sector and when applicable the general category (e.g. universities) in which the organisation operates will be mentioned in the thesis. Furthermore, the researcher explained that data was being collected from other organisations operating in other business sectors, therefore, the goal was not to focus on examining the organisation that the data was collected from, but to focus on examining two groups of employees (permanent and contingent) regardless of the organisation they work for by eventually combining permanent employees responses collected from these different organisations into one sample and to do the same with the contingent employees responses. Based on their examination of the questionnaire and the discussion with the researcher, none of the organisational contacts expressed any concerns about the distribution of the questionnaire to participants in their organisations or respective units and they were kindly enthusiastic to provide help to the researcher. Finally, the researcher discussed with the organisational contacts the details and practicalities relating to the pilot testing and the distribution of the questionnaire to respondents and consequently the collection of completed questionnaires from respondents.

Based on what was agreed upon with each organisational contact, each of the key organisational contacts in turn recruited respondents (both permanent and contingent employees who work alongside each other) and administered a paper-based questionnaire to each of these respondents. The number of questionnaires distributed in each organisation was determined based on the estimate made by each organisational contact on how many questionnaires he/she can distribute to potential participants in his/her respective organisation. In some cases, additional questionnaires were handed to the organisational contact upon his/her request. In some organisations (e.g. the telecommunication and the media organisations), potential participants were present only in one or few departments of the organisation, that is, only one or few departments of the organisation operated using a blended workforce. In the remaining organisations targeted (e.g. the two education institutions, and the governmental institution) almost all departments operated using a blended workforce.

The questionnaire was slightly modified for each organisation, to reflect the type of contingent co-worker present in the workforce of that organisation. In the questionnaire, participants were instructed to respond to items measuring their trust, trustworthiness perceptions, antisocial work behaviours and interpersonal citizenship behaviours towards two types of referents: permanent co-workers and contingent co-workers. When responding to items pertaining to each type of referent, the participant was instructed to choose and think about one co-worker in that referent category, who he/she closely worked with (e.g. in the same department), and in case they had more than one co-worker from the referent category, they were instructed to choose the one they have most closely worked with.

An 'information sheet' (see Appendix 3.1) was attached to the distributed questionnaire to serve a number of purposes. Most importantly it was used to: explain to potential participants the nature and aims of the study; invite potential participants to participate in the study and solicit their consent; explain that participation in the study is voluntary and that they can withdraw at any time during the study; and to guarantee the confidentiality of data collected from participants, and that the data collected will be used only for the purposes of scientific inquiry.

To guarantee and maintain the confidentiality of participants and the data they provided, a number of measures were taken:

- 1- The researcher refrained from asking the participant to provide any information that can be used to identify the participants' identity (e.g. the participants' name or the names of co-workers).
- 2- To ensure that the responses provided by participants were not exposed to anyone else in the organisation (e.g. management; co-workers), the organisational contact was instructed to inform each participant (upon handing the questionnaire to that participant) that the completed questionnaire will be personally collected by the researcher, and there is no need to submit it to the organisational contact. Therefore, whenever the researcher was present onsite, the organisational contact would inform participants who wanted to submit their completed questionnaires to hand them directly to the researcher in a certain location within the organisation. In other cases, where it was not possible for the organisational contact to inform the participants about the presence of the

researcher onsite, the researcher (accompanied by the organisational contact) would go to these participants at their offices to personally collect the completed questionnaires from them.

- 3- The researcher refrained from asking participants to sign an informed consent form in order to keep their participation anonymous, and instead, informed them in the information sheet and again at the end of the questionnaire that by filling in the questionnaire, and handing it back to the researcher, they are giving their consent to take part in the study.

### 5.3 Response Rates

The total number of questionnaires distributed in all five organisations was 629. Submitted questionnaires that had responses to less than 95% of the items were removed from the data set.

Table 5.1: Survey response rates

| Business sector   | Questionnaires |           |        | Number of participants |                | Response rate <sup>c</sup> |
|-------------------|----------------|-----------|--------|------------------------|----------------|----------------------------|
|                   | Distributed    | Submitted | Usable | P <sup>a</sup>         | C <sup>b</sup> |                            |
| Education 1       | 181            | 50        | 48     | 40                     | 8              | 27%                        |
| Education 2       | 161            | 62        | 59     | 46                     | 13             | 37%                        |
| Telecommunication | 100            | 38        | 27     | 17                     | 10             | 27%                        |
| Government        |                |           |        |                        |                |                            |
| Branch 1          | 85             | 31        | 28     | 21                     | 7              | 33%                        |
| Branch 2          | 52             | 24        | 16     | 16                     | 0 <sup>d</sup> | 31%                        |
| Media             | 50             | 27        | 22     | 14                     | 8              | 44%                        |
| Total             | 629            | 232       | 200    | 154                    | 46             | 32%                        |

<sup>a</sup>Permanent employee. <sup>b</sup>Contingent employee. <sup>c</sup>Response rates were rounded up and computed by dividing the number of usable questionnaires by the number of distributed questionnaires. <sup>d</sup>No questionnaires were obtained from contingent employees working in branch 2.

For submitted questionnaires with less than 5% missing data, mean substitution was used to replace missing values. Mean substitution is carried out when “means are calculated from available data and are used to replace missing values prior to analysis” (Tabachnick and Fidell, 2013, p.67). The reason the researcher chose this method for dealing with missing values was that very few questionnaires with less than 5% missing values were detected, and all of those had missing values for only 1 to 3 items of the whole questionnaire. According to Tabachnick and Fidell (2013) mean substitution can be used to deal with missing values if the proportion of missing values is very small.

Table 5.1 shows the response rates from each organisation. The table also shows that in total, 200 usable questionnaires were submitted by employees working in these organisations, resulting in a total response rate of 32%. Of these 200 usable questionnaires, 154 questionnaires were completed by permanent employees, and 46 questionnaires were completed by contingent employees.

The specific response rates and numbers of questionnaires distributed in each organisation were as follows:

- For the first organisation operating in the education sector, 181 questionnaires were distributed to the academic staff working in one of the faculties/schools in that university, 50 employees submitted their questionnaires, of which 48 provided complete answers, resulting in a 27% response rate. Of these 48 participants, 40 were permanent employees and 8 were contingent employees.
- For the second organisation operating in the education sector, 161 questionnaires were distributed to academic staff from three of that university's faculties/schools, 62 employees submitted their questionnaires, of which 59 provided complete responses, resulting in 37% response rate. Of these 59 participants, 46 were permanent employees and 13 were contingent employees.
- For the organisation operating in the telecommunication sector, 100 questionnaires were distributed to employees from three different departments; 38 employees submitted their questionnaires, of which 27 provided complete responses, resulting in a 27% response rate. Of these 27 participants, 17 were permanent employees and 10 were contingent employees.
- For the organisation operating in the governmental sector, questionnaires were distributed to two geographically separated branches of that organisation, 85 and 52



questionnaires were distributed to employees in branch 1 and branch 2 respectively. From branch 1 and 2, the number of employees who submitted the questionnaire was 31 and 24 employees respectively. 28 respondents from branch 1 and 16 respondents from branch 2 provided complete responses, resulting in 33% and 31% response rates respectively. Of the 28 respondents from branch 1, 21 were permanent employees and 7 were contingent employees. The 16 respondents from branch 2 were all permanent employees; no questionnaires were by contingent employees working in that branch.

- For the organisation operating in the media sector, 50 questionnaires were distributed to employees from two different departments, 27 employees submitted their questionnaires, of which 22 provided complete responses, resulting in a 44% response rate. Of these 22 participants, 14 were permanent employees and 8 were contingent employees.

## **5.4 Sample Characteristics**

For the first sample composed of 154 permanent employees, 66.9% are male, and 33.1% female. The average age of the 154 participants is 40.38 years ( $SD= 10$  years), and their average organisational tenure is 10.23 years ( $SD= 7.7$  years). In terms of their educational level, 92.9% of these permanent employees have degree qualifications (bachelor, master and PhD degrees), and 7.1% have lower educational qualifications. Finally, 55.9% of the 154 participants work in the education sector, 11% in the telecommunications sector, 9.1% in the media sector, and 24% in the government sector.

In the second sample of 46 contingent employees, 71.7% are male, and 28.3% female. The average age of the 46 participants is 31.56 years ( $SD= 11.19$  years), and their average organisational tenure is 2.3 years ( $SD= 2$  years). In terms of their educational level, 95.7% have degree qualifications (bachelor, master and PhD degrees) and 4.3% have lower educational qualifications. Finally, 45.7% of the 46 participants work in the education sector, 21.7% in the telecommunications sector, 17.4% in the media sector and 15.2% in the government sector.

## 5.5 Measures

Employee self-reports were used to collect data on all the study variables. The final version of the questionnaire (English version) and an Arabic translation of the items of each scale included in the questionnaire are presented in Appendix 3.2 and Appendix 3.3 respectively. In the first section of the questionnaire, respondents were asked to answer background questions (e.g. demographics, tenure, etc). In the second part, data on the main variables of the study were collected. The variables of trustworthiness, propensity to trust and trust climate were measured using a five point Likert-type scale with responses ranging from 1- strongly disagree to 5- strongly agree. Trust was measured using a five point Likert-type scale with responses ranging from 1- not at all willing to 5- completely willing. Antisocial work behaviours and interpersonal citizenship behaviours towards a contingent or permanent co-worker were also measured using a five point Likert-type scale with the following responses: 1- Never, 2- Rarely, 3- Occasionally, 4- Often, and 5- Very often. Measures used in the questionnaire are as follows (reliabilities for the measures used in this study and calculated from data gathered for this study will be reported later in the results section of this thesis):

Propensity to trust: this variable was assessed using 8 items from the 10 item international personality item pool (IPIP) trust scale (Goldberg, 1999). Two items ('trust others' and 'distrust people') from the ten item scale were removed since they measure trust. The reported internal reliability of the 10 item scale is .82 (Goldberg, 1999). Sample items of the 8 item scale used in the current research include (e.g. 'I believe that others have good intentions' and 'I suspect hidden motives in others'). Knoll and Gill (2011) used 8 of the 10 item international personality item pool trust scale to measure propensity to trust and reported an alpha score of .82. A number of reasons drove the researcher to use this measure instead of other available measures of trust propensity. One reason was that one of these available measures, namely the 8-items trust propensity scale developed by Mayer and Davis's (1999) scored relatively low to moderate reliabilities in previous studies that utilized it.

For example, Mayer and Davis (1999) used this scale in two waves of questionnaires and reported the following alpha scores: .55 and .66 respectively. Gill et al. (2005) reported a .64 alpha score for this 8-item scale. While Colquitt et al. (2007) report that

one of the most commonly used scales to measure trust propensity is the trust facet of the NEO PI-R agreeableness scale developed by Costa and McCrae (1992), this instrument was not available to the researcher. However the IPIP reports a correlation of 0.79 (0.95 if corrected for unreliability) between its 10-item trust scale and that of the NEO.

Trustworthiness factors: the three factors of trustworthiness (ability, benevolence and integrity) were assessed using the scales developed by Mayer and Davis (1999). Given that the Mayer and Davis (1999) measures were originally developed to assess the perceived trustworthiness of top management, the items of these scales were slightly altered from their original form to reflect contingent employees and permanent employees as the referents of trustworthiness. Perceived ability of the contingent co-worker and permanent co-worker is measured using 6 items (e.g. I feel confident about my [...referent...] co-worker's skills). The perceived benevolence of the contingent co-worker and permanent co-worker scale consists of 5 items (e.g. my [...referent...] co-worker would not knowingly do anything to hurt me). And finally, 6 items are used to measure the perceived integrity of the contingent co-worker and permanent co-worker (e.g. sound principles seem to guide my [...referent...] co-worker's behaviour). Mayer and Davis (1999) reported internal reliabilities for their original ability, integrity and benevolence scales between 0.85 and 0.88; 0.87 and 0.89; and 0.82 and 0.88 respectively. Similarly, Mayer and Gavin (2005) utilized these measures in their study and reported Cronbach's alpha coefficients for the ability, benevolence, and integrity scales as follows: .91, .92, and .89 respectively when the referent is the plant manager, and .89, .87, and .85 respectively when the referent is the top management team. A number of other empirical studies focusing on trust in co-workers have used these measures and reported Cronbach alpha's for ability, benevolence and integrity as follows: .94, .92, .90 respectively (Tan and Lim, 2009), and .92, .91, .91 respectively (Knoll and Gill, 2011).

Trust in co-worker (both contingent and permanent): this variable was measured using a 10 item scale developed by Gillespie (2003) to assess interpersonal trust in work relationships between leaders and their followers, and between peers. According to Gillespie (2003) this 10 items scale was specifically designed to assess the willingness to be vulnerable in interpersonal work relationships by engaging in two types of trusting behaviours in these relationships, namely reliance and disclosure. The items were

slightly modified to reflect the type of co-worker (contingent co-worker and permanent co-worker) as the intended referents of trust. Respondents were asked to indicate how willing they are to engage in a number of behaviours towards the intended trust referent. Sample items from the trust scale include: how willing are you to “rely on your [...referent...] work related judgment” and “share your personal feelings with your [...referent...]” and “depend on your [...referent...] to back you up in difficult situations”. Gillespie (2003) reported Cronbach’s alpha coefficients of the trust scale for a sample of leaders and their direct reports as follows: .92 for reliance and .91 for disclosure.

Antisocial behaviour towards the contingent or permanent co-worker: this variable was assessed using a 6-items measure used by Aquino and Douglas (2003) to describe potentially harmful actions targeted towards co-workers. According to Aquino and Douglas (2003) this 6 item scale was taken from a 13 item scale used by Douglas and Martinko (2001) to assess potentially harmful actions targeting co-workers, and the 13 item scale was adapted from a 9 item scale measuring individual anti-social behaviour developed by Robinson and O’Leary-Kelly (1998). The items were slightly modified to reflect the contingent co-worker and the permanent co-worker as the intended recipients of the workplace antisocial behaviours. Sample items from the antisocial behaviour towards the temporary co-worker include “saying unkind things to purposely harm my [...referent...] co-worker while at work” and “criticizing my [...referent...] co-worker while at work”. Respondents are asked to indicate how often they engaged in these antisocial behaviours on a 5 point Likert scale. Aquino and Douglas (2003) reported a Cronbach alpha score of .88 for this 6 item scale.

Interpersonal citizenship behaviour (ICB) towards the contingent or the permanent co-worker: this variable was measured using an 8 item scale and a 6 item scale developed by Settoon and Mossholder (2002) to measure person-focused interpersonal citizenship behaviours and task-focused interpersonal citizenship behaviours respectively. The scale items were slightly modified to reflect the intended referent of the ICB behaviours. Participants were asked to indicate the extent to which they engage in person-focused and task focused ICB behaviours towards the intended referent. Sample items include: “taking time to listen to my [...referent...] problems and worries”, “helping my [...referent...] with difficult assignments, even when assistance is not directly requested” and “trying to cheer up my [...referent...] who is having a bad

day”. Settoon and Mossholder (2002) reported Cronbach alpha scores of .95 for task-focused ICB, and .93 for person-focused ICB.

Control variables: in addition to the variables of interest, this study controlled for a number of demographic variables including: age, gender, education level and organisational tenure which is measured as “the self-reported number of years the person had been employed by the organization” (Thau et al., 2007, p.1163). These four variables were included as control variables based on Abdul Rahim and Nasurdin (2008) who note that these variables were found to be significant predictors of workplace deviant behaviours in past research. Furthermore, Tan and Lim (2009) note that the literature has divulged that a number of demographic variables such as: age, gender, educational level and tenure may influence the hypothesized relationships between trust, its antecedents and outcomes. In addition to these four variables and based on previous research (e.g. Mayer et al., 1995; Colquitt et al., 2007), propensity to trust was also considered as a control variable when testing the relationship between trustworthiness factors and trust.

Finally, based on the results of empirical studies (e.g. Knoll and Gill, 2011) which provide empirical evidence to the existence of positive relations between and among trust in different referents (e.g. trust in supervisor was found to be positively related to trust in subordinate and trust in peer), the variable ‘trust climate’ was controlled for when testing the relationship between trust and its antecedents and outcomes and more importantly between trust in a contingent co-worker and trust in a permanent co-worker. This variable was assessed using a 5 item measure developed by Zeffane (2009) which was inspired by the trust scale developed by Ferres et al. (2004). According to Zeffane (2009) the measure assesses overall beliefs in good intentions of organisation participants as well as the degree of faith and trust in various organisational actors including co-workers and managers at different organisational hierarchy levels. Sample items include (e.g. ‘I believe that most people in this workplace have good intentions’ and ‘I have faith/trust in the promises or statements of colleagues (co-workers) here’). Zeffane (2009) reported an internal reliability of .88 for the scale.

As will be shown and reported in the following chapter, the Cronbach Alphas reported in this thesis for the measures noted earlier were all above the normally acceptable

level, with the exception of one Alpha score (.691) for propensity to trust in the contingent employee sample that was slightly below the acceptable level.

Alpha scores reported in this thesis for the propensity to trust scale, .712 in the permanent employee sample; .691 in the contingent employee sample; and .705 in the combined employee sample, were relatively low when compared to those reported in previous research for the same measure (e.g. .82 in Knoll and Gill, 2011). They are also relatively low when compared to alpha scores for the other study variables in this study.

The relatively low Cronbach alpha for the propensity to trust scale can be attributed to a number of reasons. According to Tavakol and Dennick (2011) the value of Cronbach alpha is affected by the correlations among the test items, the length of the test and the sample of testees. Thus, low Alpha scores for the propensity to trust scale can be attributed to the limited number of items in the scale (in this thesis, after the removal of 2 items that did not fit well with the remaining items, only 6 items were used to measure propensity to trust). Moreover, the low alpha scores could be attributed to low correlations between the items of the scale when used in the context of Jordanian organisations. It may be sensible for researchers using this scale in a Jordanian context to revisit the phrasing of the items and possibly to increase the number of items.

Given that the alpha score for propensity to trust across was only marginally below the generally accepted level for one of the three samples, data from the scale were included in the analyses, though the limitations of this decision are noted.

## **5.6 Summary**

This chapter provided an overview of the methods, tools and procedures used to collect quantitative data to address research questions concerned with examining the antecedent and outcomes of trust within co-worker contexts involving permanent and contingent co-worker. The following chapter is concerned with describing the procedures followed to statistically analyse the collected data and to test the hypotheses proposed in this thesis. The chapter also reports the results of both the preliminary analyses and primary analyses to which the collected data was subjected.

## **CHAPTER SIX**

### **Analysis of Quantitative Data**

#### **6.1 Introduction**

Each one of the proposed hypotheses was tested using data collected from 1- permanent employees (n=154), 2- contingent employees (n=46) and 3- a combination of those two samples (n=200). This procedure was followed in order to test the proposed hypotheses in the different work relationship contexts that exist as a result of permanent and contingent employees interacting among and between each other.

#### **6.2 Procedure for Data Analysis**

Due to the use of the scales and items in a new and different context (Jordanian organisations) from those in which they were originally developed, exploratory factor analysis (EFA) using principle components analysis (PCA) was conducted to evaluate the scales, including any need to reduce the number of items for each instrument. Next a 'one-way between-groups ANOVA with post-hoc tests' was conducted to compare the five groups/organisations with respect to their mean scores on the study's main variables and to decide on the appropriateness of combining the five groups into one sample for the analysis (the results for this test are reported in Appendix 4.7).

Since the questionnaire measures are based on self-report, a Harman's one-factor test was used to test for common method variance. According to Podsakoff and Organ (1986) the Harman's one-factor test can be used to control for common method variance by entering all the variables of the study into a factor analysis and then examining the results of the unrotated factor solution to determine the number of factors necessary to account for the variance in the variables. Harman's one-factor test assumes that "if a substantial amount of common method variance is present, either (a) a single factor will emerge from the factor analysis, or (b) one "general" factor will account for the majority of the covariance in the independent and criterion variables." (Podsakoff and

Organ, 1986, p.536). This approach has been used by a number of empirical studies such as that of Tan and Lim (2009).

The data in this study are nested since the individual participants (unit of analysis) in this study are themselves nested in five different organisations (groups). The original intention was to analyse the data using multilevel hierarchical linear modelling (MLM). However, because of the limited number of organisations (groups) and because the sample sizes (Table 6.1) for these groups are relatively small, the use of MLM analysis was not justified. According to Tabachnick and Fidell (2013) MLM models require a substantial sample size at each level. They state that “sufficient power for cross-level effects is obtained when sample sizes at the first level are not too small and the number of groups is 20 or larger” (p.793). As a result, in place of MLM techniques, the researcher applied general linear model techniques (e.g. hierarchical regression analysis) to test the hypotheses of the study.

Table 6.1: Groups sample sizes

| Groups                  | Employee participants |                   | Total |
|-------------------------|-----------------------|-------------------|-------|
|                         | Permanent             | Contingent        |       |
| Education 1             | 40                    | 8                 | 48    |
| Education 2             | 46                    | 13                | 59    |
| Telecommunication       | 17                    | 10                | 27    |
| Government (2 branches) | 37                    | 7 (from branch 1) | 44    |
| media                   | 14                    | 8                 | 22    |
| Total                   | 154                   | 46                | 200   |

Descriptive analyses (e.g. means, standard deviations) and reliability tests were conducted first. The hypotheses H1 to H7 and H9 to H13 are tested via correlations and hierarchical regression analysis (assumptions for this test are discussed in section 6.3.3).

Relative weights analysis is used to test H8. In order to obtain standardized regression coefficients and other relative importance statistics useful to the purposes of this analysis, a standard multiple regression analysis was conducted with ability,



benevolence and integrity of the respective co-worker (permanent or contingent) entered concurrently as predictors and trust in the respective co-worker (permanent or contingent) as the dependent variable, without controlling for any other variables (e.g. age, gender, etc.). Furthermore, “semipartial correlations were used to infer the unique contribution of each variable to the overall model” (Knoll and Gill, 2011, p.322). However, Johnson and Lebreton (2004) note that both regression coefficients and semipartial correlations are not ideal measures of relative importance since they are affected by multicollinearity. Moreover, according to Kraha, Turner, Nimon, Zientek and Henson (2012, p.8) “traditional reliance on standardized or unstandardized weights will often lead to poor or inaccurate interpretations when multicollinearity or suppression is present in the data”. In response to these limitations, the J.W. Johnson’s (2000) relative weights method (see Johnson, 2000; Johnson, 2004; Johnson and Lebreton, 2004, for an overview) was also used to infer the relative importance of the three trustworthiness components in predicting trust in a co-worker. Kraha et al. (2012, p.4) explain that these relative importance weights “are the proportionate contribution from each predictor to  $R^2$ ” and they “tend to focus on attributing general credit to primary predictors rather than detailing the various parts of the dependent variable that are explained”. According to Johnson and Lebreton (2004) when considering all the relative importance indices available, Johnson’s (2000) relative weights method along with the dominance analysis method are the most preferable methods for inferring the relative importance of predictor variables. Kraha et al. (2012) point out those relative weights can be useful in the presence of multicollinearity.

The relative weights of the predictor variables were calculated using an SPSS syntax program developed in 2009 by Lorenzo-Seva and Ferrando (see Lorenzo-Seva, Ferrando and Chico, 2010, for an overview). Furthermore, for the purposes of the relative weights analysis, a bootstrapping procedure is used, (see Johnson, 2004, for an overview), where “500 bootstrap samples were used to construct 95 per cent confidence intervals around all pairwise differences between relative weights.” (Knoll and Gill, 2011, p.322). The bootstrapping procedure was performed using an SPSS syntax program that computes relative weights within 100 bootstrap samples; the researcher contacted Dr. Jeff W. Johnson (see Johnson, 2004) in order to obtain the appropriate SPSS syntax.

Finally, a paired sample T-test was used to test H14, H15 and H16, which all propose statistically significant differences between those perceptions, attitudes and behaviours directed towards an in-group member and those directed towards an out-group member.

## **6.3 Preliminary Analysis**

### **6.3.1 Principal Component Analyses (PCA)**

The items for each one of the 16 scales used to collect data from permanent and from contingent employees were subjected to principal components analysis (PCA) with Oblimin rotation as advised by Pallant (2010). PCA was conducted to achieve two objectives: firstly, to assess, by comparing factor structures, whether or not the scales operated in the same way for the sample of permanent employees (n=154) as for that of contingent employees (n=46). Secondly, to assess whether or not the scale items operated differently in the context of Jordanian organisations, the factor structures from PCA analysis of the permanent employee sample, contingent employee sample and the combination of both samples (n=200) were compared with those identified in previous studies. One objective of this process was also to assess the need to adjust the number of items in the scales used.

Prior to the PCA; the suitability of data for factor analysis was assessed. Appendix 4.1 shows the values of KMO and Bartlett's test for each of the three samples analysed. Tabachnick and Fidell (2013, p620), recommend that KMO "values of .6 and above are required for good FA.". For each one of the 16 scales used in the three samples, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy exceeded this value. Field (2009) and Pallant (2010) both advise that for factor analysis to work, the Bartlett's Test of Sphericity needs to have a significance value of  $p < 0.05$ . Significance values for Bartlett's test for the items of each one of the 16 scales used in the three samples all showed  $p < 0.01$ . These results clearly supported the factorability of the correlation matrix and indicated that correlations between items were sufficiently large for PCA.

In relation to the criterion used (e.g. kaisers criterion; scree plots; component matrix) to decide the number of factors to extract from a scale, Fabrigar, Wegener, MacCallum, and Strahan (1999) note that compared to other more problematic procedures such as eigenvalues greater than 1 and the likelihood ratio statistic, scree plots are one of the

procedures that are likely to perform reasonably well when choosing the number of factors. Thus, only scree plots are used to decide on how many components to extract for each one of the 16 scales in the three samples<sup>1</sup>.

Table 6.2: Number of components recommended to be retained by scree plots for each of the three samples (n=154, 46, 200)

| #  | Scale title  | Number of components  |                       |                       |
|----|--|-----------------------|-----------------------|-----------------------|
|    |  | Sample 1 <sup>a</sup> | Sample 2 <sup>b</sup> | Sample 3 <sup>c</sup> |
| 1  | Propensity to trust (8 items)                          | 2                     | 1 and 3               | 3                     |
| 2  | Trust climate  | 1                     | 2                     | 1                     |
| 3  | Ability of contingent co-worker                        | 1                     | 1                     | 1                     |
| 4  | Benevolence of contingent co-worker                    | 1                     | 1                     | 1                     |
| 5  | Integrity of contingent co-worker                      | 1                     | 1                     | 1                     |
| 6  | Trust in contingent co-worker                          | 2                     | 2                     | 2                     |
| 7  | Antisocial work behaviour towards contingent co-worker | 1                     | 1                     | 1                     |
| 8  | Ability of permanent co-worker                         | 1                     | 1                     | 1                     |
| 9  | Benevolence of permanent co-worker                     | 1                     | 1                     | 1                     |
| 10 | Integrity of permanent co-worker                       | 1                     | 1                     | 1                     |
| 11 | Trust in permanent co-worker                           | 2                     | 2                     | 2                     |
| 12 | Antisocial work behaviours towards permanent co-worker | 1                     | 1                     | 1                     |
| 13 | Person focused ICB towards contingent co-worker        | 1                     | 2                     | 1                     |
| 14 | Task focused ICB towards contingent co-worker          | 1                     | 1                     | 1                     |
| 15 | Person focused ICB towards permanent co-worker         | 1                     | 1                     | 1                     |
| 16 | Task focused ICB towards permanent co-worker           | 1                     | 1                     | 1                     |

<sup>a</sup>Permanent employee sample (n=154). <sup>b</sup>Contingent employee sample (n=46). <sup>c</sup>Combined employee sample (n=200).

Table 6.2 shows the number of components extracted from each scale based on the inflection points identified in each scree plot.

<sup>1</sup>Eigenvalues greater than 1 and the component matrix were also looked at. Appendix 4.2 shows a comparison made between the Kaisers criterion, scree plots and the component matrix based on the number of components each recommends to extract. The number of components (to be extracted from a scale) recommended by the scree plots criterion was the same as that recommended by Kaisers criterion and the component matrix.

Scree plots that resulted from the PCA analysis for each scale in each sample (please refer to Appendix 4.3) were inspected for inflexion points; “where the slope of the line changes dramatically” (Field, 2009, p.639-640).

Table 6.2 was also used to: first, compare between the factor structures in the permanent employee sample and those in the contingent employee sample and second, to compare the factor structures produced by the dataset used in this thesis with those in previous research.

A comparison of the factor structures of the scales for the permanent employee sample with those of the contingent employee sample (Table 6.2) indicated that with only three exceptions, all scales operated the same way in these two samples. Exceptions were the scales of trust climate and person focused ICB towards contingent co-worker<sup>2</sup> in addition to propensity to trust (8 items).

Comparison of the factor structures of these scales with those reported in previous research also showed that with the exception of the same three scales of propensity to trust, trust climate and person focused ICB towards a contingent co-worker, the factor structures of the scales were consistent<sup>3</sup>. This indicates that these scales operated in broadly the same way in the context of Jordanian organisations as they operated in the contexts in which they were originally developed.

In relation to whether there is a need to adjust the number of items in each of the scales, inspection of the reliability values for each of the 16 scales (presented in a later section) shows acceptable values (above .70) for almost all of the scales used in the three samples. In summary, this indicates that, with the exception of one scale (propensity to trust), there is no need to remove any items from the other remaining scales.

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<sup>2</sup>For the scales trust climate and person-focused ICBs towards contingent co-workers in the contingent employee sample (n=46), inspection of the PCA output labelled ‘component matrix’ for each of these scales showed a two factor structure for each scale. However, for each of these scales, all of the items loaded strongly on the first component while not all items loaded on the second component. This evidence may suggest that a one-factor solution is also appropriate for each of the two scales. This one-factor solution is consistent with the factor structures of these two scales in the other two samples.

<sup>3</sup>For example, the results of PCA reported in this thesis and those reported by Gillespie (2003) for the trust scale consisting of 10 items developed by Gillespie (2003) both found a two factor structure for this scale. Even for the scales trust climate and person-focused ICB towards a contingent co-worker in the contingent employee sample, the evidence from the component matrix indicating the appropriateness of a one-factor solution for these two scales is consistent with these scales’ factor structures in previous research.

With regard to the propensity to trust scale, its reliability values and its inconsistent factor structures across the three samples required further action to address these two issues. Further consideration of the internal reliability of the ‘propensity to trust’ scale and the results of PCA after forcing a one-factor solution for this scale led to a decision to remove two items with relatively low commonalities (items 2 and 3), from the scale<sup>4</sup>. According to Pallant (2010) an item’s low value (e.g. less than .3) could indicate that the item does not fit well with other items in its component. Table 6.3 shows the reliability scores for the ‘propensity to trust’ scale when used in the permanent employee, contingent employee and combined samples when different combinations of items are deleted from the propensity to trust scale.

Results of PCA on the propensity to trust scale (after removing items 2 and 3) indicate that the remaining items of the scale fit well together across the three samples. The resulting scree plots (Appendix 4.4) show that one component was extracted in the permanent employee sample while two were extracted in the other two samples. However, since all of the scale’s items loaded strongly on the first component while not loading on the second component, a one-factor solution for this scale in these two samples is also appropriate.

Table 6.3: Cronbach Alpha score if items were deleted from the ‘Propensity to trust scale’ (8 items) in the three samples (n=154, 46, 200)

| Samples | Cronbach Alpha            |                     |        |             |                |
|---------|---------------------------|---------------------|--------|-------------|----------------|
|         | Initial for 8 items scale | if item was deleted |        |             |                |
|         |                           | Item 2              | Item 3 | Items 2 & 3 | Items 2, 3 & 7 |
| 1       | .700                      | .670                | .726   | .712        | .695           |
| 2       | .687                      | .671                | .688   | .691        | .718           |
| 3       | .695                      | .669                | .716   | .705        | .698           |

<sup>a</sup>Permanent employee sample (n=154). <sup>b</sup>Contingent employee sample (n=46). <sup>c</sup>Combined employee sample (n=200).

<sup>4</sup>The forcing of a one-factor solution for the propensity to trust scale in the PCA led to the identification of three items (items 2, 3 and 7) that did not fit well with other items of the scale across the three samples.

To summarize, examination of the results of PCA conducted on each one of the questionnaires' 16 scales (used in the three samples), supported by the results of reliability analysis, showed that, with one minor exception, the dimensionality of the scales was the same for permanent and contingent employees and the factor structures were consistent with previous research.

### **6.3.2 Common Method Variance**

To check for the presence of common method variance, Harman's one-factor test (Podsakoff and Organ, 1986) was conducted on all the items for all 16 scales used in the permanent employee sample (n=154), the contingent employee sample (n=46) and the combined sample (n=200). Multiple factors emerged in each of the three samples. The first factor in the permanent employee sample accounted for 27.2% of the variance explained, for the contingent employee sample the figure was 28.7% and for the combined employee sample 27.0%. Given that multiple factors emerged in each sample rather than a 'single factor', and since each 'first factor' that emerged in each respective sample did not account for the majority of the variance in variables in that sample, it can be concluded that there was no substantial amount of common method variance in this study.

### **6.3.3 Statistical Tests Assumptions**

For both, the 'one-way between-groups ANOVA with post-hoc tests' and the paired samples t-test, four assumptions were tested: level of measurement, normal distribution, independence of observations and homogeneity of variance. These assumptions are each discussed next.

First, given that the dependent variables in this thesis were measured using continuous scales, the 'level of measurement' assumption was not violated. Second, according to Pallant (2010) the violation of the assumption of normal distribution should not cause major problems when large enough samples sizes are available (30+). As is the case in this thesis. Third, since participants within each of the three samples (permanent, contingent and combined) were from different industries, organisations and departments and the identity of the co-workers whom each participant was asked to rate was not known to other participants in the study, it can be concluded that the data collected from

these different participants are independent and the ‘independence of observations’ assumption was not violated.

Fourth, Appendix 4.5 shows that with only very few exceptions in each of the three samples, all variables in this thesis have significance values greater than the significance level (.01) set for the ANOVA test in this study, thus indicating that for this test and these variables, the assumption of homogeneity of variance was not violated. In relation to the few exceptions in each sample that violated this assumption, Field (2009) states that when the assumption of homogeneity of variance is violated, the Welch’s and the Brown-Forsythe F-ratios should be examined instead. Those (also reported in Appendix 4.5) show that of these few exceptions only ‘antisocial work behaviours towards a contingent co-worker’ in the contingent employee sample and the combined sample violated the homogeneity of variance assumption. However, this is not a concern since the contingent employee sample (n=46) and the combined employee sample (n=200) each consists of five groups with sensibly similar sizes (please refer Table 6.1 for group sizes). Pallant (2010) notes that analysis of variance is reasonably robust to violations of the homogeneity assumption when the sizes of the groups are reasonably similar.

As for the hierarchical regression analyses, three assumptions were tested: normality, sample size and multicollinearity.

First, in relation to normality, normal probability plots for each regression model reported in this chapter are presented in Appendix 4.6. Inspection of these plots shows the value points lying in a reasonably straight line. This indicates no major deviations from normality.

Second, with regard to the sample size assumption, one of the common rules that some authors (e.g. Field, 2009; Stevens, 1996) point to is the need for at least 15 participants or cases of data per predictor. Almost all of the regression models tested met this requirement. However, four regression models in the contingent employee sample (n=46) violated the assumption. These were: the two regression models testing the relationship between the four trust antecedents and trust in both permanent and contingent co-worker in addition to the two regression models testing the relationship between trust in permanent co-worker and trust in contingent co-worker and vice-versa. In each of these four regression tests using data from the contingent employee sample, the minimum required sample size (which was based on the number of predictors in

each of these regression models) was 60, which is higher than the available sample size ( $n=46$ ). Thus the results of these four regression tests cannot be generalised to other settings. This is one of the limitations of this study.

Finally, in relation to the multicollinearity assumption, for each regression model reported in this chapter, all independent variables included in the model had tolerance values above .10 and VIF values less than 10, indicating that the multicollinearity assumption is not violated.

#### **6.3.4 Descriptive Statistics, Inter-Correlations and Reliability Analysis**

Means, standard deviations, inter-correlations, and reliabilities for the measures used in this thesis are reported in Table 6.4 for the permanent employee sample ( $n=154$ ), in Table 6.5 for the contingent employee sample ( $n=46$ ) and in Table 6.6 for the combined sample ( $n=200$ ). The Cronbach alphas are presented on the diagonal.

As shown in tables 6.4, 6.5 and 6.6, the reliability coefficients for the study variables in the three samples with one exception in one sample, exceed the acceptable level of Cronbach's Alpha, suggesting good to very good internal reliability.

Means and standard deviations presented in tables 6.4, 6.5 and 6.6 show that the mean scores for most of the study variables in the three samples were moderate to high. By contrast, the mean score levels of the variables antisocial work behaviours towards a contingent co-worker and towards a permanent co-worker were low in the three samples. One observation made was that the mean scores of antisocial work behaviours toward a co-worker in the contingent employee sample were higher than those in the permanent employee sample. This may indicate that contingent employees engage in antisocial work behaviours towards their co-workers (either permanent or contingent) slightly more frequently than permanent employees do towards their respective co-workers.

Finally, examination of the correlations presented in tables 6.4, 6.5 and 6.6 shows that in the three samples, most of the hypothesized relationships between variables were initially supported with significant correlations. These correlations are reported in more detail in the 'results' section of this chapter as part of the analysis testing each hypothesis. Finally, the correlations between the control variables and dependent variables are discussed in the results section.



Table 6.4 (Part 1): Descriptive statistics, correlations, and reliabilities for permanent employee sample (n=154)

| Variable title   | M      | SD     | 1       | 2      | 3      | 4      | 5      | 6      |
|--|--------|--------|---------|--------|--------|--------|--------|--------|
| 1. Propensity to trust                                     | 3.4502 | .59168 | (.712)  | -      | -      | -      | -      | -      |
| 2 Trust climate  | 3.1701 | .75694 | .635**  | (.889) | -      | -      | -      | -      |
| 3. Ability of contingent co-worker                         | 3.6645 | .67747 | .317**  | .280** | (.888) | -      | -      | -      |
| 4. Benevolence of contingent co-worker                     | 3.3753 | .73184 | .245**  | .272** | .706** | (.848) | -      | -      |
| 5 Integrity of contingent co-worker                        | 3.5247 | .70926 | .303**  | .296** | .663** | .813** | (.884) | -      |
| 6. Trust in contingent co-worker                           | 3.0110 | .84332 | .209**  | .202*  | .613** | .670** | .611** | (.941) |
| 7. Antisocial work behaviour towards contingent co-worker  | 1.7208 | .58388 | -.236** | -.198* | -.140  | -.171* | -.148  | -.003  |
| 8. Ability of permanent co-worker                          | 3.8474 | .65373 | .137    | .146   | .416** | .263** | .349** | .185*  |
| 9. Benevolence of permanent co-worker                      | 3.4481 | .76117 | .267**  | .262** | .478** | .434** | .445** | .373** |
| 10. Integrity of permanent co-worker                       | 3.6117 | .73680 | .271**  | .346** | .482** | .379** | .422** | .342** |
| 11. Trust in permanent co-worker                           | 3.2883 | .79154 | .177*   | .113   | .392** | .333** | .405** | .445** |
| 12. Antisocial work behaviours towards permanent co-worker | 1.7630 | .62034 | -.194*  | -.098  | -.183* | -.075  | -.145  | .037   |
| 13. Person-focused ICB towards contingent co-worker        | 3.2524 | .80217 | .299**  | .279** | .532** | .558** | .531** | .654** |
| 14. Task-focused ICB towards contingent co-worker          | 2.9805 | .94184 | .260**  | .222** | .446** | .427** | .381** | .519** |
| 15. Person-focused ICB towards permanent co-worker         | 3.5065 | .70244 | .198*   | .133   | .347** | .300** | .372** | .331** |
| 16. Task-focused ICB towards permanent co-worker           | 3.3604 | .77672 | .187*   | .110   | .312** | .314** | .371** | .374** |

Note. Continued next page.

Table 6.4 (Part 2): Descriptive statistics, correlations, and reliabilities for permanent employee sample (n=154)

| Variable title   | 7       | 8       | 9       | 10      | 11      | 12      | 13     | 14     | 15     | 16     |
|--|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|
| 1. Propensity to trust                                     | -       | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 2 Trust climate  | -       | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 3. Ability of contingent co-worker                         | -       | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 4. Benevolence of contingent co-worker                     | -       | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 5. Integrity of contingent co-worker                       | -       | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 6. Trust in contingent co-worker                           | -       | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 7. Antisocial work behaviour towards contingent co-worker  | (.783)  | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 8. Ability of permanent co-worker                          | -.214** | (.895)  | -       | -       | -       | -       | -      | -      | -      | -      |
| 9. Benevolence of permanent co-worker                      | -.156   | .641**  | (.870)  | -       | -       | -       | -      | -      | -      | -      |
| 10. Integrity of permanent co-worker                       | -.245** | .688**  | .785**  | (.890)  | -       | -       | -      | -      | -      | -      |
| 11. Trust in permanent co-worker                           | -.046   | .611**  | .682**  | .662**  | (.927)  | -       | -      | -      | -      | -      |
| 12. Antisocial work behaviours towards permanent co-worker | .554**  | -.460** | -.322** | -.456** | -.219** | (.772)  | -      | -      | -      | -      |
| 13. Person-focused ICB towards contingent co-worker        | -.027   | .162*   | .296**  | .275**  | .335**  | -.075   | (.909) | -      | -      | -      |
| 14. Task-focused ICB towards contingent co-worker          | .046    | .097    | .296**  | .262**  | .287**  | -.120   | .794** | (.928) | -      | -      |
| 15. Person-focused ICB towards permanent co-worker         | -.081   | .491**  | .540**  | .521**  | .663**  | -.290** | .502** | .477** | (.896) | -      |
| 16. Task-focused ICB towards permanent co-worker           | -.083   | .383**  | .467**  | .454**  | .581**  | -.187*  | .498** | .508** | .780** | (.889) |

Note. n=154. A dash ( - ) in a cell means data are not reported. Alpha coefficients appear on the diagonal in parentheses ( ).

\* $p < 0.05$ , Two- tailed. \*\* $p < 0.01$ , Two- tailed.

Table 6.5 (Part 1): Descriptive statistics, correlations, and reliabilities for contingent employee sample (n=46)

| Variable title   | M      | SD      | 1       | 2       | 3      | 4      | 5      | 6      |
|--|--------|---------|---------|---------|--------|--------|--------|--------|
| 1. Propensity to trust                                     | 3.4855 | .59195  | (.691)  | -       | -      | -      | -      | -      |
| 2. Trust climate   | 3.4174 | .67307  | .478**  | (.796)  | -      | -      | -      | -      |
| 3. Ability of contingent co-worker                         | 3.5942 | .87323  | .429**  | .573**  | (.911) | -      | -      | -      |
| 4. Benevolence of contingent co-worker                     | 3.4522 | .97108  | .428**  | .475**  | .804** | (.935) | -      | -      |
| 5. Integrity of contingent co-worker                       | 3.3522 | .98087  | .464**  | .477**  | .724** | .883** | (.919) | -      |
| 6. Trust in contingent co-worker                           | 3.1913 | .82914  | .289    | .064    | .388** | .487** | .457** | (.912) |
| 7. Antisocial work behaviour towards contingent co-worker  | 1.8116 | .85607  | -.503** | -.228   | -.126  | -.237  | -.226  | -.150  |
| 8. Ability of permanent co-worker                          | 3.7536 | .96720  | .506**  | .425**  | .472** | .452** | .521** | .381** |
| 9. Benevolence of permanent co-worker                      | 3.3000 | 1.03944 | .341*   | .375*   | .280   | .198   | .223   | .234   |
| 10. Integrity of permanent co-worker                       | 3.4696 | 1.07432 | .288    | .381**  | .302*  | .286   | .322*  | .225   |
| 11. Trust in permanent co-worker                           | 3.1457 | .91061  | .261    | .218    | .175   | .170   | .161   | .426** |
| 12. Antisocial work behaviours towards permanent co-worker | 1.7464 | .74845  | -.467** | -.392** | -.169  | -.214  | -.225  | -.101  |
| 13. Person-focused ICB towards contingent co-worker        | 3.4783 | .81748  | .469**  | .217    | .357*  | .396** | .381** | .642** |
| 14. Task-focused ICB towards contingent co-worker          | 3.2065 | .91839  | .242    | .209    | .308*  | .203   | .168   | .501** |
| 15. Person-focused ICB towards permanent co-worker         | 3.4429 | .75678  | .362*   | .288    | .164   | .160   | .128   | .309*  |
| 16. Task-focused ICB towards permanent co-worker           | 3.3188 | .93017  | .288    | .222    | .144   | .072   | .046   | .168   |

Note. Continued next page.

Table 6.5 (Part 2): Descriptive statistics, correlations, and reliabilities for contingent employee sample (n=46)

| Variable title   | 7       | 8       | 9       | 10      | 11     | 12     | 13     | 14     | 15     | 16     |
|--|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|
| 1. Propensity to trust                                     | -       | -       | -       | -       | -      | -      | -      | -      | -      | -      |
| 2. Trust climate   | -       | -       | -       | -       | -      | -      | -      | -      | -      | -      |
| 3. Ability of contingent co-worker                         | -       | -       | -       | -       | -      | -      | -      | -      | -      | -      |
| 4. Benevolence of contingent co-worker                     | -       | -       | -       | -       | -      | -      | -      | -      | -      | -      |
| 5. Integrity of contingent co-worker                       | -       | -       | -       | -       | -      | -      | -      | -      | -      | -      |
| 6. Trust in contingent co-worker                           | -       | -       | -       | -       | -      | -      | -      | -      | -      | -      |
| 7. Antisocial work behaviour towards contingent co-worker  | (.893)  | -       | -       | -       | -      | -      | -      | -      | -      | -      |
| 8. Ability of permanent co-worker                          | -.385** | (.951)  | -       | -       | -      | -      | -      | -      | -      | -      |
| 9. Benevolence of permanent co-worker                      | -.113   | .683**  | (.955)  | -       | -      | -      | -      | -      | -      | -      |
| 10. Integrity of permanent co-worker                       | -.199   | .727**  | .872**  | (.928)  | -      | -      | -      | -      | -      | -      |
| 11. Trust in permanent co-worker                           | -.069   | .433**  | .538**  | .518**  | (.938) | -      | -      | -      | -      | -      |
| 12. Antisocial work behaviours towards permanent co-worker | .608**  | -.552** | -.469** | -.551** | -.324* | (.875) | -      | -      | -      | -      |
| 13. Person-focused ICB towards contingent co-worker        | -.314*  | .397**  | .328*   | .344*   | .455** | -.326* | (.907) | -      | -      | -      |
| 14. Task-focused ICB towards contingent co-worker          | .104    | .106    | .291    | .189    | .371*  | .018   | .692** | (.912) | -      | -      |
| 15. Person-focused ICB towards permanent co-worker         | -.021   | .344*   | .558**  | .526**  | .788** | -.290  | .460** | .412** | (.908) | -      |
| 16. Task-focused ICB towards permanent co-worker           | .025    | .324*   | .561**  | .464**  | .677** | -.254  | .462** | .505** | .865** | (.925) |

Note. n=154. A dash ( - ) in a cell means data are not reported. Alpha coefficients appear on the diagonal in parentheses ( ).

\* $p < 0.05$ , Two- tailed. \*\* $p < 0.01$ , Two- tailed.

Table 6.6 (Part 1): Descriptive statistics, correlations, and reliabilities for combined sample (n=200)

| Variable title   | M      | SD     | 1       | 2       | 3      | 4       | 5      | 6      |
|--|--------|--------|---------|---------|--------|---------|--------|--------|
| 1. Propensity to trust                                     | 3.4583 | .59044 | (.705)  | -       | -      | -       | -      | -      |
| 2. Trust climate   | 3.2270 | .74420 | .599**  | (.873)  | -      | -       | -      | -      |
| 3. Ability of contingent co-worker                         | 3.6483 | .72539 | .344**  | .340**  | (.894) | -       | -      | -      |
| 4. Benevolence of contingent co-worker                     | 3.3930 | .79125 | .294**  | .322**  | .736** | (.877)  | -      | -      |
| 5. Integrity of contingent co-worker                       | 3.4850 | .78078 | .342**  | .319**  | .684** | .829**  | (.896) | -      |
| 6. Trust in contingent co-worker                           | 3.0525 | .84145 | .228**  | .184**  | .541** | .615**  | .547** | (.934) |
| 7. Antisocial work behaviour towards contingent co-worker  | 1.7417 | .65521 | -.309** | -.191** | -.137  | -.192** | -.181* | -.041  |
| 8. Ability of permanent co-worker                          | 3.8258 | .73599 | .243**  | .208**  | .437** | .328**  | .416** | .233** |
| 9. Benevolence of permanent co-worker                      | 3.4140 | .83287 | .282**  | .272**  | .412** | .348**  | .370** | .321** |
| 10. Integrity of permanent co-worker                       | 3.5790 | .82581 | .269**  | .332**  | .419** | .341**  | .389** | .294** |
| 11. Trust in permanent co-worker                           | 3.2555 | .82026 | .195**  | .124    | .328** | .278**  | .330** | .430** |
| 12. Antisocial work behaviours towards permanent co-worker | 1.7592 | .65006 | -.265** | -.167*  | -.178* | -.120   | -.169* | .001   |
| 13. Person-focused ICB towards contingent co-worker        | 3.3044 | .80928 | .339**  | .278**  | .472** | .509**  | .466** | .654** |
| 14. Task-focused ICB towards contingent co-worker          | 3.0325 | .93906 | .257**  | .230**  | .399** | .363**  | .304** | .519** |
| 15. Person-focused ICB towards permanent co-worker         | 3.4919 | .71386 | .236**  | .160*   | .294** | .255**  | .298** | .320** |
| 16. Task-focused ICB towards permanent co-worker           | 3.3508 | .81228 | .212**  | .131    | .260** | .236**  | .265** | .316** |

Note. Continued next page.

Table 6.6 (Part 2): Descriptive statistics, correlations, and reliabilities for combined sample (n=200)

| Variable title   | 7       | 8       | 9       | 10      | 11      | 12      | 13     | 14     | 15     | 16     |
|--|---------|---------|---------|---------|---------|---------|--------|--------|--------|--------|
| 1. Propensity to trust                                     | -       | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 2. Trust climate   | -       | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 3. Ability of contingent co-worker                         | -       | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 4. Benevolence of contingent co-worker                     | -       | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 5. Integrity of contingent co-worker                       | -       | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 6. Trust in contingent co-worker                           | -       | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 7. Antisocial work behaviour towards contingent co-worker  | (.824)  | -       | -       | -       | -       | -       | -      | -      | -      | -      |
| 8. Ability of permanent co-worker                          | -.283** | (.916)  | -       | -       | -       | -       | -      | -      | -      | -      |
| 9. Benevolence of permanent co-worker                      | -.144*  | .658**  | (.901)  | -       | -       | -       | -      | -      | -      | -      |
| 10. Integrity of permanent co-worker                       | -.230** | .704**  | .818**  | (.905)  | -       | -       | -      | -      | -      | -      |
| 11. Trust in permanent co-worker                           | -.057   | .550**  | .636**  | .613**  | (.930)  | -       | -      | -      | -      | -      |
| 12. Antisocial work behaviours towards permanent co-worker | .568**  | -.488** | -.368** | -.484** | -.248** | (.801)  | -      | -      | -      | -      |
| 13. Person-focused ICB towards contingent co-worker        | -.105   | .222**  | .291**  | .280**  | .353**  | -.142*  | (.909) | -      | -      | -      |
| 14. Task-focused ICB towards contingent co-worker          | .067    | .092    | .281**  | .227**  | .297**  | -.085   | .774** | (.925) | -      | -      |
| 15. Person-focused ICB towards permanent co-worker         | -.063   | .440**  | .543**  | .519**  | .696**  | -.289** | .484** | .455** | (.899) | -      |
| 16. Task-focused ICB towards permanent co-worker           | -.047   | .361**  | .497**  | .456**  | .609**  | -.207** | .481** | .500** | .802** | (.899) |

Note. n=154. A dash ( - ) in a cell means data are not reported. Alpha coefficients appear on the diagonal in parentheses ( ).

\* $p < 0.05$ , Two- tailed. \*\* $p < 0.01$ , Two- tailed.

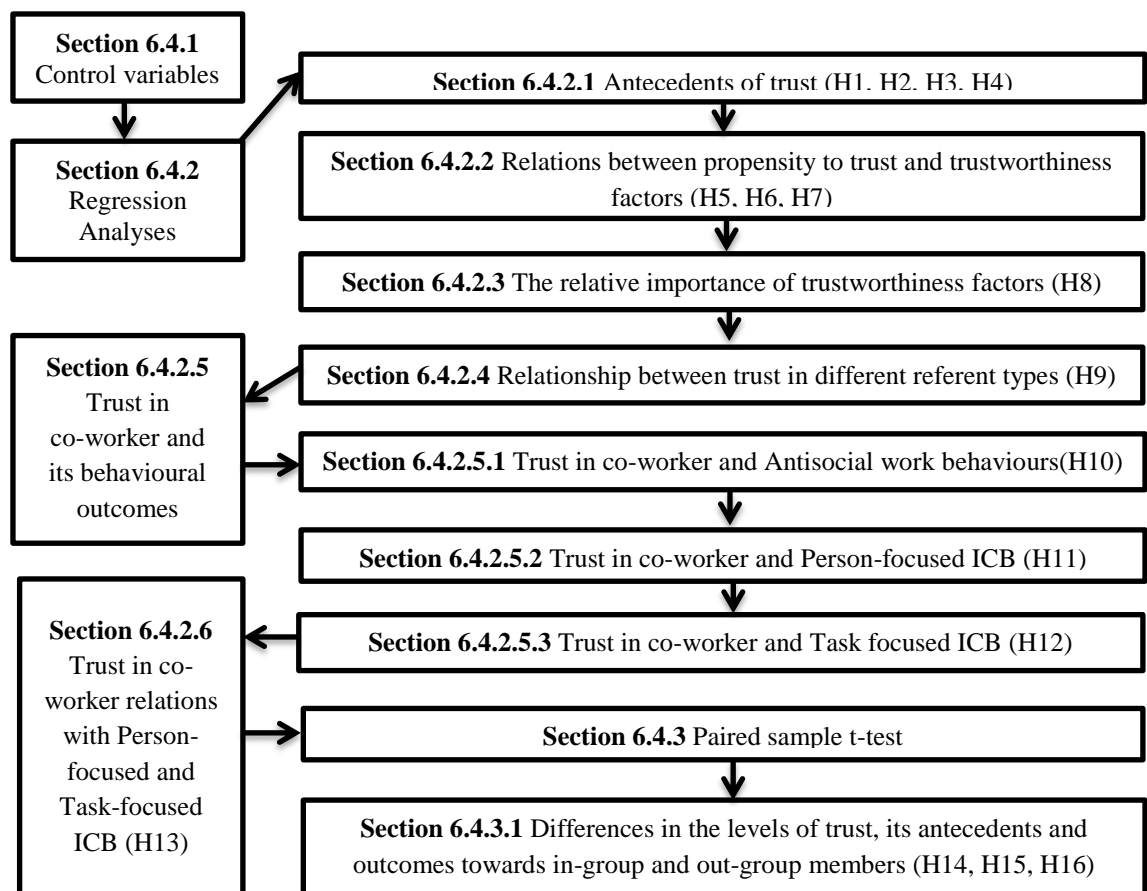
### 6.3.5 One-Way between-Groups ANOVA with POST-HOC Tests'

To ensure that there are no statistically significant differences in each variable's means across the organisations from which data was collected, a 'one-way between-groups ANOVA with post-hoc tests' was conducted. The results of this 'between firms test' are presented in Appendix 4.7. Based on the results of this test which show that most of the variables did not differ significantly in their means across organisations and for the ones that did, this difference was marginal, it was decided that there was no reason to prevent from combining participants from different organisations to eventually form the three samples which are examined in this thesis.

## 6.4 Results

Figure 6.1 provides a comprehensive diagram of the presentation of results in this section. Each of the sections presented in the diagram will end with a brief summary of the results.

Figure 6.1: Structure and flow of the results section



### 6.4.1 Control Variables

A number of variables were considered as potential control variables. Mirroring previous research (see chapter five), these included age, gender, education level, organisational tenure, propensity to trust and finally trust climate. For each of the three samples (n=154, n=46, n=200) examined, correlations between the proposed control variables and the dependent variables were mostly weak and more importantly non-significant (Please refer to the three correlation matrices in Appendix 4.8). Thus only control variables that were significantly correlated with the respective dependent variable and at the same time theoretically linked to this dependent variable in previous research were controlled for when testing a proposed hypothesis. Table 6.7 provides a summary of the controlled variables.

Table 6.7: Controlled variables for each dependent variable in each of the three samples(n=154, 46, 200)

| Dependent variables                                     | Control variables                    |                       |                                      |
|---|--------------------------------------|-----------------------|--------------------------------------|
|   | Sample 1 <sup>a</sup>                | Sample 2 <sup>b</sup> | Sample 3 <sup>c</sup>                |
| Trust in contingent co-worker                           | (Trust climate, Propensity to trust) |                       | (Trust climate, Propensity to trust) |
| Trust in permanent co-worker                            | (Propensity to trust)                |                       | (Propensity to trust)                |
| Antisocial work behaviours towards contingent co-worker | (Age, Gender, Tenure, Trust climate) | (Tenure)              | (Trust climate)                      |
| Antisocial work behaviours towards permanent co-worker  |                                      | (Trust climate)       | (Trust climate)                      |
| Person-focused ICB towards contingent co-worker         | (Trust climate)                      |                       | (Education level, Trust climate)     |
| Task-focused ICB towards contingent co-worker           | (Education level, Trust climate)     |                       | (Education level, Trust climate)     |
| Person-focused ICB towards permanent co-worker          | (Age, Tenure)                        |                       | (Education level, Trust climate)     |
| Task-focused ICB towards permanent co-worker            |                                      |                       |                                      |

*Note.* An empty cell means control variable(s) are not applicable. Control variables for each dependent variable are presented in parentheses ( ).

<sup>a</sup>Permanent employee sample (n=154). <sup>b</sup>Contingent employee sample (n=46). <sup>c</sup>Combined employee sample (n=200).



This was done because initially, the regression analyses were conducted using all of these control variables. However, as shown in table 6.8, for most of the regression models, the variance explained by these control variables (age, gender, organisational tenure, education level, business sector and trust climate) entered at step 1 in the hierarchical regression analyses was relatively small considering the number of these control variables (6 control variables). Moreover, in most of the regression models, the beta coefficients for these control variables were not significant.

The use of control variables for the regression analyses reported in this chapter is also related to the sample sizes. In order to not violate the sample size assumption for regression and increase the possibility of generalising results from the regression analyses, the number of independent variables included in each regression model had to be minimised as much as possible, so that the number of variables in each regression model would be compatible with the available sample sizes and thus, generalisation of results remain possible.

In addition to the control variables specified in table 6.7, tables 6.4, 6.5 and 6.6 show significant correlations between the three trustworthiness factors and trust. Thus, all three were controlled for when testing the impact of other variables on trust.

Finally, given that this thesis also looks at whether or not employees differentiate between their permanent and contingent co-workers in terms of trust, trustworthiness assessments and behaviours towards these co-workers, it should be noted that results from the initial analyses provides some indication that age, gender, organisational tenure, education level and business sector have, at most, weak influences on the variables of interest in this study. This helps rule out these variables as potential explanations for why employees would differentiate between permanent and contingent employees in terms of trust and the other constructs.

Furthermore, even though it might be argued that these control variables may be used by employees as relevant categorisation variables to form their in-group and out-group perceptions, and thus, based on these perceptions, employee would differentiate (e.g. in terms of trust) between their in-group and out-group co-workers, an examination of whether or not these in-group and out-group perceptions (formed by any of these control variables) can lead the employee to differentiate between in-group and out-group members is not possible in this thesis.

Table 6.8:  $R^2$  for all control variables when included in the regression analyses (n=154, 46, 200).

| Dependent variable                                      | Control variable included  | $R^2$ and <i>adj. R<sup>2</sup></i> for control variables |                            |                            |
|---|--|---|----------------------------|----------------------------|
|   |  | Sample 1 <sup>a</sup>                                     | Sample 2 <sup>b</sup>      | Sample 3 <sup>c</sup>      |
| Trust in contingent co-worker                           | (Age, Gender, organisational tenure, education level, business sector and trust climate) | .081<br>(adj. $R^2$ =.043)                                | .167<br>(adj. $R^2$ =.038) | .073<br>(adj. $R^2$ =.039) |
| Trust in permanent co-worker                            | (Age, Gender, organisational tenure, education level, business sector and trust climate) | .049<br>(adj. $R^2$ =.010)                                | .288<br>(adj. $R^2$ =.178) | .061<br>(adj. $R^2$ =.027) |
| Antisocial work behaviours towards contingent co-worker | (Age, Gender, organisational tenure, education level, business sector)                   | .122<br>(adj. $R^2$ =.092)                                | .187<br>(adj. $R^2$ =.085) | .068<br>(adj. $R^2$ =.039) |
| Antisocial work behaviours towards permanent co-worker  | (Age, Gender, organisational tenure, education level, business sector)                   | .043<br>(adj. $R^2$ =.011)                                | .058<br>(adj. $R^2$ =.059) | .027<br>(adj. $R^2$ =.003) |
| Person-focused ICB towards contingent co-worker         | (Age, Gender, organisational tenure, education level, business sector)                   | .050<br>(adj. $R^2$ =.018)                                | .175<br>(adj. $R^2$ =.072) | .069<br>(adj. $R^2$ =.040) |
| Task-focused ICB towards contingent co-worker           | (Age, Gender, organisational tenure, education level, business sector)                   | .116<br>(adj. $R^2$ =.086)                                | .058<br>(adj. $R^2$ =.060) | .086<br>(adj. $R^2$ =.057) |
| Person-focused ICB towards permanent co-worker          | (Age, Gender, organisational tenure, education level, business sector)                   | .120<br>(adj. $R^2$ =.090)                                | .187<br>(adj. $R^2$ =.085) | .101<br>(adj. $R^2$ =.073) |
| Task-focused ICB towards permanent co-worker            | (Age, Gender, organisational tenure, education level, business sector)                   | .079<br>(adj. $R^2$ =.047)                                | .164<br>(adj. $R^2$ =.060) | .056<br>(adj. $R^2$ =.027) |

*Note.* Control variables are presented in parentheses ( ). When using data from sample 3, employment status was also controlled for along with the control variables specified for each dependent variable.

<sup>a</sup>Permanent employee sample (n=154). <sup>b</sup>Contingent employee sample (n=46). <sup>c</sup>Combined employee sample (n=200).

This is because such an examination requires asking participants in the study to choose two co-workers (when answering the questionnaire) according to the control variable of interest (e.g. chose a co-worker with the same educational level and chose another with a different educational level), however this was not done in this thesis (was not an objective of the thesis) since participants were only asked to choose two co-workers (i.e. one with a the same employment status and one with a different employment status).

Additional research is required for examining whether or not employees differentiate between co-workers from in-groups and out-groups formed using one of these control variables as a categorisation variable. For example, if age is being investigated as the possible explanatory factor for why an employee would differentiate between his/her in-group and out-group co-workers in terms of trust, the participant should be asked to rate two co-workers (one with the same age or age group as the respondent and the other with a different age or age group than that of the respondent). Similarly, if gender was chosen as an explanatory factor, the participant would be asked to answer questions about two co-workers, one with the same gender and the other with a different gender. As for organisational tenure, the respondent would be asked to rate a co-worker with the same organisational tenure and a co-worker with a different organisational tenure.

#### **6.4.2 Regression Analyses**

This section tests hypotheses 1 to 13 using mostly regression analyses. It should be noted that given the small size of the contingent employee sample ( $n=46$ ) (one of the limitations of this study discussed in chapter eight) and its influence on reducing the power of the regression test, the results of hypotheses testing using data from this small sample should be viewed in light of this limitation. As noted in the section concerned with the assumptions of statistical tests used in this study, the size of this sample limits the generalizability of results produced from four regression models (specified earlier in that section). Moreover, and in relation to all regression models tested using data from this sample ( $n=46$ ), any non-significant results may be attributed to the insufficient power of the regression test due to the small size of this sample. This may lead to results that fail to detect the reality of the hypothesized relationships in this sample. Therefore, the generalisability of results produced using data from this contingent employee sample ( $n= 46$ ) is limited and does not extend beyond this sample and the results should be viewed in light of this limitation.

#### **6.4.2.1 Antecedents of Trust in a Permanent/Contingent Co-worker**

H1, H2 and H3 state that there is a significant positive correlation between each of the three perceived trustworthiness factors of the trustee (ability, benevolence and integrity respectively) and trust in a) the contingent co-worker and b) the permanent co-worker. H4, proposes that there is a positive relationship between a trustor's propensity to trust and trust in (a) the contingent co-worker, (b) the permanent co-worker.

Examination of the correlations presented in tables 6.4, 6.5 and 6.6 shows that in the three samples, perceptions of the trustees' ability, benevolence and integrity were positively and significantly ( $p < .01$ ) correlated with trust in that trustee. Hence, H1 (a,b), H2 (a,b), H3 (a,b) are initially supported in the three samples. Also, propensity to trust was positively and significantly correlated with trust in permanent and in contingent co-workers in both the permanent employee sample and the combined sample. Thus, H4 (a,b) were initially supported by these two sample results. As for the sample of contingent employees, the correlations between propensity to trust and trust in a permanent or contingent co-worker were positive yet not statistically significant; hence, H4 (a,b) was not initially supported in this sample.

##### **6.4.2.1.1 Antecedents of Trust in Contingent Co-worker**

For the dependent variable 'trust in contingent co-worker', (please refer to table 6.9) trust climate and propensity to trust were controlled for at step 1 in the first ( $n=154$ ) and third ( $n=200$ ) samples. Both variables explained 5.2% (adjusted R square = 3.9%) and 5.5% (adjusted R square = 4.6%) of the variance in 'trust in contingent co-worker' in samples 1 and 3 respectively. for the second sample ( $n=46$ ) no control variables qualified to be included in the regression analysis as described earlier (please see table 6.7). However, in order to test H4 propensity to trust was entered at step 1 and explained 8.3% (adjusted R square = 6.3%) of the variance in the dependent variable.

Next, the perceived ability, benevolence and integrity of the contingent co-worker were entered at step 2 and explained an additional 44.2%, 16.4% and 34.5% of the variance in 'trust in contingent co-worker' in samples 1, 2 and 3 respectively after controlling for the variables entered at step 1 in each sample. For  $n=154$ ,  $R$  squared change = .442,  $F$  change (3, 148) = 43.037,  $p < .001$ . For  $n=46$ ,  $R$  squared change = .164,  $F$  change (3, 41)

= 2.983,  $p < .05$ . As for  $n=200$ ,  $R$  squared change = .345,  $F$  change (3, 194) = 37.245,  $p < .001$ .

Table 6.9 shows that the total variance explained by the model as a whole in each respective sample was as follows: 49.4% (adjusted  $R$  square = 47.6%) in sample 1 and the model was significant,  $F$  (5, 148) = 28.842,  $p < .001$ . 24.8% (adjusted  $R$  square = 17.4%) in sample 2 and the model was significant,  $F$  (4, 41) = 3.373,  $p < .05$ . 40.1% (adjusted  $R$  square = 38.5%) in sample 3 and the model was also significant,  $F$  (5, 194) = 25.937,  $p < .001$ .

Table 6.9: Hierarchical regression analysis examining antecedents to trust in contingent co-worker ( $n=154, 46, 200$ )

| Predictor                           | Samples      |         |              |         |              |         |
|-------------------------------------|--------------|---------|--------------|---------|--------------|---------|
|                                     | 1            |         | 2            |         | 3            |         |
|                                     | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ |
| Step 1                              | .052         |         | .083         |         | .055         |         |
| Control variables <sup>a</sup>      |              | –       |              | –       |              | –       |
| Step 2                              | .442         |         | .164         |         | .345         |         |
| Trust climate                       |              | -.016   |              |         |              | -.074   |
| Propensity to trust                 |              | .004    |              | .093    |              | .059    |
| Ability of contingent co-worker     |              | .257**  |              | -.037   |              | .183*   |
| Benevolence of contingent co-worker |              | .388**  |              | .399    |              | .428*** |
| Integrity of contingent co-worker   |              | .129    |              | .089    |              | .071    |
| Total $R^2$                         | .494***      |         | .248*        |         | .401***      |         |
| $n$                                 | 154          |         | 46           |         | 200          |         |

*Note.* A dash ( - ) in a cell means data are not reported or not obtained. An empty cell means data are not applicable. Table template adapted from “Publication Manual of the American Psychological Association” (2010), p. 145.

<sup>a</sup>Control variables for  $n=154$  and  $n=200$  include trust climate and propensity to trust, and for  $n=46$  they include propensity to trust.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

In the first sample (n=154), the final model (please refer to table 6.9) showed that only two of the trustworthiness components (ability and benevolence of contingent co-worker) were both positively related to the dependent variable and statistically significant, with perceived benevolence of a contingent co-worker recording a higher beta value ( $\beta = .388, p = .001$ ) than the perceived ability of a contingent co-worker ( $\beta = .257, p < .005$ ). Thus, *H1a* and *H2a* were supported in this sample. However, as table 6.9 shows, integrity of contingent co-worker ( $\beta = .129$ , *not significant*), propensity to trust ( $\beta = .004$ , *not significant*) and trust climate ( $\beta = -.016$ , *not significant*) did not have a statistically significant contribution, thus, *H3a* and *H4a* were not supported in this sample.

In the second sample (n=46), the final model did not produce any statistically significant Beta coefficients for any of the variables included in the model. Thus, *H1a*, *H2a*, *H3a* and *H4a* were not supported in this sample.

Lastly, in the third sample (n=200), only ability of contingent co-worker ( $\beta = .183, p < .05$ ) and benevolence of contingent co-worker ( $\beta = .428, p < .001$ ) had statistically significant Beta coefficients in the final model. Thus, within this sample, these results provide support for *H1a* and *H2a*, but not for *H3a* and *H4a*.

#### **6.4.2.1.2 Antecedents of Trust in Permanent Co-worker**

Similarly, trust in a permanent co-worker was regressed onto its proposed antecedents in each sample (please refer to table 6.10). In samples 1, 2 and 3, propensity to trust was controlled for at step 1 and explained 3.1% (adjusted R square = 2.5%), 6.8% (adjusted R square = 4.7%) and 3.8% (adjusted R square = 3.3%) of the variance in 'trust in permanent co-worker' in samples 1, 2 and 3 respectively.

Entered at step 2 were the perceived ability, benevolence and integrity of the permanent co-worker. An additional 50.1%, 23.9% and 40.7% of the variance in 'trust in permanent co-worker' in samples 1, 2 and 3 respectively were explained by the three trustworthiness factors after controlling for propensity to trust at step 1. For n=154,  $R^2$  change = .501,  $F$  change (3, 149) = 53.169,  $p < .001$ . For n=46,  $R^2$  change = .239,  $F$  change (3, 41) = 4.722,  $p < .01$ . As for n=200,  $R^2$  change = .407,  $F$  change (3, 195) = 47.736,  $p < .001$ .

The total variance explained by the final model in each respective sample (table 6.10) was as follows: 53.2% (adjusted R square = 52%) in sample 1 and the model was also significant,  $F(4, 149) = 42.369, p < .001$ . 30.7% (adjusted R square = 24%) in sample 2 and the final model was significant,  $F(4, 41) = 4.549, p < .01$ . 44.5% (adjusted R square = 43.4%) in sample 3, and the final model was significant,  $F(4, 195) = 39.157, p < .001$ .

Table 6.10: Hierarchical regression analysis examining antecedents to trust in permanent co-worker (n=154, 46, 200)

| Predictor                          | Samples      |         |              |         |              |         |
|------------------------------------|--------------|---------|--------------|---------|--------------|---------|
|                                    | 1            |         | 2            |         | 3            |         |
|                                    | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ |
| Step 1                             | .031         |         | .068         |         | .038         |         |
| Propensity to trust                |              | .177    |              | .261    |              | .195**  |
| Step 2                             | .501         |         | .239         |         | .407         |         |
| Propensity to trust                |              | -.012   |              | .079    |              | -.002   |
| Ability of permanent co-worker     |              | .226**  |              | .035    |              | .176*   |
| Benevolence of permanent co-worker |              | .364*** |              | .324    |              | .365*** |
| Integrity of permanent co-worker   |              | .223*   |              | .187    |              | .191    |
| Total R <sup>2</sup>               | .532***      |         | .307**       |         | .445***      |         |
| <i>n</i>                           | 154          |         | 46           |         | 200          |         |

*Note.* Table template adapted from “Publication Manual of the American Psychological Association” (2010), p. 145.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

As reported in table 6.10, in the first sample (n=154), the final model shows that the three trustworthiness components: ability ( $beta = .226, p < .01$ ), benevolence ( $beta = .364, p < .001$ ) and integrity ( $beta = .223, p < .05$ ) of a permanent co-worker were the only variables that were significantly and positively related to trust in a permanent co-worker, providing support for *H1b*, *H2b* and *H3b* in this sample. As table 6.10

shows, the perceived benevolence of a permanent co-worker scored the highest beta, followed by the perceived ability then the perceived integrity of a permanent co-worker. Table 6.10 also shows that propensity to trust ( $\beta = -.012$ , *not significant*) did not have a statistically significant contribution to trust in permanent co-worker in this model. Thus, *H4b* was not supported in this sample.

In the second sample ( $n=46$ ), the final model yet again did not produce any statistically significant Beta coefficients for any of the variables included in the model. Thus, *H1b*, *H2b*, *H3b* and *H4b* were not supported in this sample.

Moreover, in the third sample ( $n=200$ ), the final model shows that only benevolence of permanent co-worker ( $\beta = .365$ ,  $p < .001$ ) and ability of permanent co-worker ( $\beta = .176$ ,  $p < .05$ ) were statistically significant. Thus *H1b* and *H2b* were supported in this sample. On the other hand, the contributions made by integrity of permanent co-worker ( $\beta = .191$ ,  $p = .059$ ) and propensity to trust ( $\beta = -.002$ ,  $p = .975$ ) to the variance in the dependent variable were not statistically significant; therefore, *H3b* and *H4b* were not supported in this sample.

#### **6.4.2.1.3 Summary**

H1 and H2 were supported in the permanent employee sample (sample 1) and the combined sample (sample 3), yet not in the contingent employee sample (sample 2). H3 was only supported in the permanent employee sample when the trustee is a permanent co-worker. H4 was rejected in all three samples. These results indicate that ability and benevolence of the respective co-worker were found to be significant predictors of trust in that co-worker when the trustor is either a permanent employee or an employee in general. As for integrity, it predicted trust only in one case, when the trustor and referent of trust is a permanent employee. When the trustor is a contingent employee, the three trustworthiness factors failed to predict levels of trust in the respective co-worker.

The results pertaining to the relationship between integrity and trust were rather surprising. As these results indicate, there were no significant relationships between integrity and trust across five (out of the six) co-worker relational contexts. As will be discussed in the following chapter, this may be attributed to the length of contracts associated with each employment status and the resulting relatively limited time that these employees may have available to interact with each other and collect information



about the values of the trustee. This limited interaction and lack of information about the trustee's values may consequently cause acts demonstrating integrity (compared to those demonstrating ability or benevolence) to be rarely observed, more difficult to observe and/or harder to classify by employees as acts demonstrating integrity. This makes it harder for the trustor to assess the integrity of the trustee.

In relation to H4, regardless of the employment status of the trustor and trustee, these results show that propensity to trust was not significantly related to trust in a permanent or contingent co-worker. even though, the alpha score for the propensity to trust scale was within the commonly acceptable range, the findings in relation to the link between propensity to trust and trust in a permanent or contingent co-worker may be due to the relatively low Cronbach alpha score for this scale.

Finally, H1, H2, H3 and H4 were not supported in the contingent employee sample possibly because of the low statistical power issue (noted earlier) brought about by the limitation of the small size of this sample. Thus, findings from this sample cannot be generalised

#### **6.4.2.2 Relations between Trust Propensity and Trustworthiness Factors**

The next three hypotheses propose that there is a positive relationship between propensity to trust and the perceived ability (H5), benevolence (H6) and integrity (H7) of a) the contingent co-worker, b) the permanent co-worker. Correlations reported in tables 6.4, 6.5 and 6.6 show that with only two exceptions, propensity to trust was positively and significantly correlated with each of the three trustworthiness factors in the three samples.

The two exceptions are the correlation in the permanent employee sample between propensity to trust and perceived ability of a permanent co-worker (H5b) and that in the contingent employee sample between propensity to trust and the perceived integrity of a permanent co-worker (H7B). Thus, with the two exceptions of H5b and H7b, all the hypotheses were initially supported in the three samples.

Table 6.11 shows the results of regression analysis examining the relationship between propensity to trust and the perceived ability of the respective co-worker in each of the three samples. As presented in this table, examination of  $R^2$  shows the amount of

variance in the perceived ability explained by propensity to trust in each of the three samples and for each of the respective referents.

As noted in table 6.11 all final models were significant with one exception, that is the model including propensity to trust and the perceived ability of a permanent co-worker in sample 1 (the permanent employee sample)  $F(1, 152) = 2.908, p = .090$ .

Table 6.11 Linear regression analysis examining the predictors of the perceived ability of contingent co-worker and permanent co-worker (n=154, 46 200)

| Predictor                                    | Sample       |         |              |         |              |         |
|--|--------------|---------|--------------|---------|--------------|---------|
|  | 1            |         | 2            |         | 3            |         |
|  | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ |
| Ability of contingent co-worker <sup>a</sup> |              |         |              |         |              |         |
| Step 1                                       | .100         |         | .184         |         | .118         |         |
| Propensity to trust                          |              | .317*** |              | .429**  |              | .344*** |
| Total R <sup>2</sup>                         | .100***      |         | .184**       |         | .118***      |         |
| Ability of permanent co-worker <sup>b</sup>  |              |         |              |         |              |         |
| Step 1                                       | .019         |         | .256         |         | .059         |         |
| Propensity to trust                          |              | .137    |              | .506*** |              | .243**  |
| Total R <sup>2</sup>                         | .019         |         | .256***      |         | .059**       |         |
| n  | 154          |         | 46           |         | 200          |         |

*Note.* Table template adapted from “Publication Manual of the American Psychological Association” (2010), p. 145.

<sup>a</sup>All regression models with this variable as the dependent variable were significant: for n = 154;  $R^2 = .100$ ; adj.  $R^2 = .094$ ;  $F(1, 152) = 16.955^{***}$  (Sig. F change = .000), for n = 46;  $R^2 = .184$ ; adj.  $R^2 = .166$ ;  $F(1, 44) = 9.926^{**}$  (Sig. F change = .003), for n = 200;  $R^2 = .118$ ; adj.  $R^2 = .114$ ;  $F(1, 198) = 26.575^{***}$  (Sig. F change = .000). <sup>b</sup>Two regression models with this variable as the dependent variable were significant: for n = 46;  $R^2 = .256$ ; adj.  $R^2 = .239$ ;  $F(1, 44) = 15.123^{***}$  (Sig. F change = .000), for n = 200;  $R^2 = .059$ ; adj.  $R^2 = .054$ ;  $F(1, 198) = 12.434^{**}$  (Sig. F change = .001), however, the third model was not significant, n = 154;  $R^2 = .019$ ; adj.  $R^2 = .012$ ;  $F(1, 152) = 2.908$  (Sig. F change = .090).

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Lastly, examination of the Beta coefficients in Table 6.11 show that the contribution of propensity to trust to the explanation of variance in the perceived ability of the respective trustee was statistically significant with the one exception of the permanent employee sample ( $\beta = .137$ ,  $ns$ ). Thus, H5a and H5b were supported in all samples with one exception; H5b in the permanent employee sample 1.

Table 6.12: Linear regression analysis examining the predictors of the perceived benevolence of contingent co-worker and permanent co-worker (n=154, 46 200)

| Predictor  | Sample       |         |              |         |              |         |
|--|--------------|---------|--------------|---------|--------------|---------|
|  | 1            |         | 2            |         | 3            |         |
|  | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ |
| Benevolence of contingent co-worker <sup>a</sup> |              |         |              |         |              |         |
| Step 1   | .060         |         | .183         |         | .087         |         |
| Propensity to trust                              |              | .245**  |              | .428**  |              | .294*** |
| Total R <sup>2</sup>                             | .060**       |         | .183**       |         | .087***      |         |
| Benevolence of permanent co-worker <sup>b</sup>  |              |         |              |         |              |         |
| Step 1   | .071         |         | .116         |         | .080         |         |
| Propensity to trust                              |              | .267**  |              | .341*   |              | .282*** |
| Total R <sup>2</sup>                             | .071**       |         | .116*        |         | .080***      |         |
| <i>n</i>   | 154          |         | 46           |         | 200          |         |

*Note.* Table template adapted from “Publication Manual of the American Psychological Association” (2010), p. 145.

<sup>a</sup>All regression models with this variable as the dependent variable were significant: for  $n = 154$ ;  $R^2 = .060$ ; adj.  $R^2 = .054$ ;  $F(1, 152) = 9.680^{**}$  (Sig.  $F$  change = .002), for  $n = 46$ ;  $R^2 = .183$ ; adj.  $R^2 = .165$ ;  $F(1, 44) = 9.861^{**}$  (Sig.  $F$  change = .003), for  $n = 200$ ;  $R^2 = .087$ ; adj.  $R^2 = .082$ ;  $F(1, 198) = 18.796^{***}$  (Sig.  $F$  change = .000). <sup>b</sup>All regression models with this variable as the dependent variable were also significant: for  $n = 154$ ;  $R^2 = .071$ ; adj.  $R^2 = .065$ ;  $F(1, 152) = 11.627^{**}$  (Sig.  $F$  change = .001), for  $n = 46$ ;  $R^2 = .116$ ; adj.  $R^2 = .096$ ;  $F(1, 44) = 5.778^*$  (Sig.  $F$  change = .021), for  $n = 200$ ;  $R^2 = .080$ ; adj.  $R^2 = .075$ ;  $F(1, 198) = 17.133^{***}$  (Sig.  $F$  change = .000).

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Similarly, the results of regression analysis examining the relationship between propensity to trust and the perceived benevolence of the contingent and permanent

co-worker in each of the three samples are presented in table 6.12. As noted in this table all final models were significant and beta coefficients show that the contribution of propensity to trust to the explanation of the variance in the perceived benevolence of a contingent or a permanent co-worker was statistically significant in all three samples. Thus, H6a and H6b were supported in all samples.

Table 6.13: Linear regression analysis examining the predictors of the perceived integrity of contingent co-worker and permanent co-worker (n=154, 46 200)

| Predictor                                      | Sample       |         |              |         |              |         |
|--|--------------|---------|--------------|---------|--------------|---------|
|  | 1            |         | 2            |         | 3            |         |
|  | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ |
| Integrity of contingent co-worker <sup>a</sup> |              |         |              |         |              |         |
| Step 1   | .092         |         | .216         |         | .117         |         |
| Propensity to trust                            |              | .303*** |              | .464**  |              | .342*** |
| Total R <sup>2</sup>                           | .092***      |         | .216**       |         | .117***      |         |
| Integrity of permanent co-worker <sup>b</sup>  |              |         |              |         |              |         |
| Step 1   | .073         |         | .083         |         | .072         |         |
| Propensity to trust                            |              | .271**  |              | .288    |              | .269*** |
| Total R <sup>2</sup>                           | .073**       |         | .083         |         | .072***      |         |
| <i>n</i>                                       | 154          |         | 46           |         | 200          |         |

*Note.* Table template adapted from “Publication Manual of the American Psychological Association” (2010), p. 145.

<sup>a</sup>All regression models with this variable as the dependent variable were significant: for n =154; R<sup>2</sup> = .092; adj. R<sup>2</sup> = .086; F (1, 152) =15.368\*\*\* (Sig. F change = .000), for n =46; R<sup>2</sup> = .216; adj. R<sup>2</sup> = .198; F (1, 44) =12.101\*\* (Sig. F change = .001), for n =200; R<sup>2</sup> = .117; adj. R<sup>2</sup> = .113; F (1, 198) =26.226\*\*\* (Sig. F change = .000). <sup>b</sup>Two regression models with this variable as the dependent variable were significant: for n =154; R<sup>2</sup> = .073; adj. R<sup>2</sup> = .067; F (1, 152) =12.020\*\* (Sig. F change = .001), for n=200; R<sup>2</sup> = .072; adj. R<sup>2</sup> = .068; F (1, 198) =15.475\*\*\* (Sig. F change = .000), however, the third model was not significant, n =46; R<sup>2</sup> = .083; adj. R<sup>2</sup> = .062; F (1, 44) =3.984 (Sig. F change = .052).

\**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

As for the relationship between propensity to trust and the integrity of the respective co-worker, table 6.13 shows the results of regression analysis examining this relationship in each of the three samples. As noted in this table only one model was not statistically significant, that is the one including propensity to trust and the perceived integrity of a permanent co-worker tested in sample 2 (the contingent employee sample)  $F(1, 44) = 3.984, p = .052$ .

Beta coefficients in table 6.13 show that the contribution of propensity to trust to the explanation of variance in the perceived integrity of the respective trustee was statistically significant in all samples with the one exception of the contingent employee sample ( $\beta = .288, ns$ ). Thus, H7a and H7b were supported in all samples with one exception (H7b) in the contingent employee sample.

#### **6.4.2.2.1 Summary**

Hypotheses H5, H6 and H7 were supported in all samples with only two exceptions. These results indicate that typically the propensity to trust of a permanent employee, a contingent employee or an employee in general was positively and significantly related to each of the three perceived trustworthiness components of the respective co-worker.

#### **6.4.2.3 The Relative Importance of Trustworthiness Factors**

This section of the chapter will report on the attempt to test H8 which proposes that the perceived benevolence of the respective trustee will explain a greater amount of variance in trust in a) a contingent co-worker or b) a permanent co-worker than that explained by the perceived integrity of the respective trustee and this in turn will explain a greater amount of variance than that explained by the perceived ability of the respective trustee. For the antecedents of trust in contingent co-worker, results from the standard multiple regression and relative weights analyses are presented in table 6.14 which shows that all regression models were significant.  $F(3, 150) = 48.684, p < .001$  for sample 1 ( $n=154$ ).  $F(3, 42) = 4.446, p < .01$  for sample 2 ( $n=46$ ) and  $F(3, 196) = 43.007, p < .001$  for sample 3 ( $n=200$ ). The relative weight of predictor variables is represented in table 6.14 as the epsilon statistic ( $\epsilon$ ) and is reported as a percentage of the contribution that the variable makes to the total variance explained by all predictor variables. In sample 1, the three trustworthiness factors explained 49.3% of the variance in trust in contingent co-worker. Results from the relative weights analysis (denoted  $\epsilon$  in

table 6.14) indicate that of this 49.3% of explained variance, benevolence accounted for 39.1%, ability for 32.4%, and integrity 28.5%. In sample 2, the trustworthiness factors explained 24.1% of the variance in the dependent variable. Of this explained variance, benevolence accounted for 42.9%, integrity for 35.3%, and 21.8% was attributed to the ability of the contingent co-worker. As for sample 3, the explained variance was 39.7%, of which benevolence accounted for 42%, ability for 29.9%, and integrity for 28.1%. Tables 6.15, 6.16 and 6.17 each present the confidence intervals around all pairwise differences between relative weights of the predictors of trust in a contingent co-worker in samples 1, 2 and 3 respectively.

Table 6.14: Relative importance indices from standard multiple regression and relative weight analyses for trust in contingent co-worker (n=154, 46, 200)

| Predictor variables                 | Relative Importance Indices |        |         |                 |      |      |            |       |      |
|-------------------------------------|-----------------------------|--------|---------|-----------------|------|------|------------|-------|------|
|                                     | $\beta^a$                   |        |         | $\varepsilon^b$ |      |      | $(sr^2)^c$ |       |      |
| Ability of contingent co-worker     | .255**                      | -.016  | .181*   | 32.4            | 21.8 | 29.9 | .031       | .0001 | .015 |
| Benevolence of contingent co-worker | .387***                     | .391   | .417*** | 39.1            | 42.9 | 42.0 | .043       | .025  | .045 |
| Integrity of contingent co-worker   | .127                        | .124   | .077    | 28.5            | 35.3 | 28.1 | .005       | .003  | .002 |
| $R^2$                               | .493***                     | .241** | .397*** |                 |      |      |            |       |      |
| n <sup>d</sup>                      | 154                         | 46     | 200     | 154             | 46   | 200  | 154        | 46    | 200  |

<sup>a</sup> $\beta$  =standardized coefficient (Beta). <sup>b</sup> $\varepsilon$  = epsilon statistic. <sup>c</sup> $sr^2$ = squared semi-partial correlation. <sup>d</sup>n= sample size.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Concerning the relative weights analysis and the bootstrapping procedure, “the null hypothesis for this analysis is that difference between relative weights is zero; therefore, relative weights are considered significantly different when confidence intervals do not include zero.” (Knoll and Gill, 2011, p.322). As shown in tables 6.15, 6.16 and 6.17, the confidence intervals for the difference between any two of these trustworthiness

predictors include zero, thereby indicating that the relative weights of any two of these predictors are not significantly different from one another. Thus, H8a is rejected and the null hypothesis is accepted in all three samples.

Table 6.15: Confidence intervals around all pairwise differences between relative weights for the dependent variable trust in contingent co-worker (n=154)

| Predictor 1                         | Predictor 2                         | Difference <sup>a</sup> | SE <sup>b</sup> | Confidence interval |       |
|-------------------------------------|-------------------------------------|-------------------------|-----------------|---------------------|-------|
|                                     |                                     |                         |                 | Lower               | Upper |
| Ability of contingent co-worker     | Benevolence of contingent co-worker | -6.7                    | 9.91            | -29.9               | 16.5  |
| Ability of contingent co-worker     | Integrity of contingent co-worker   | 3.9                     | 9.18            | -17.6               | 25.4  |
| Benevolence of contingent co-worker | Integrity of contingent co-worker   | 10.6                    | 6.92            | -5.59               | 26.8  |

*Note.* Some values under the SE, lower and upper columns were rounded up for display purposes only. Table template adapted from “Antecedents of Trust in Supervisors, Subordinates, and Peers”. By Knoll, D, L., and Gill, H.(2011). *Journal of Managerial Psychology*, 26 (4), p.323.

<sup>a</sup>Difference between relative weights. <sup>b</sup>SE = standard error of the difference between relative weights.

\* $p < .05$ . Experiment-wise.

Table 6.16: Confidence intervals around all pairwise differences between relative weights for the dependent variable trust in contingent co-worker (n=46)

| Predictor 1                         | Predictor 2                         | Difference <sup>a</sup> | SE <sup>b</sup> | Confidence interval |       |
|-------------------------------------|-------------------------------------|-------------------------|-----------------|---------------------|-------|
|                                     |                                     |                         |                 | Lower               | Upper |
| Ability of contingent co-worker     | Benevolence of contingent co-worker | -21.1                   | 15.9            | -58.5               | 16.3  |
| Ability of contingent co-worker     | Integrity of contingent co-worker   | -13.5                   | 21.5            | -63.7               | 36.7  |
| Benevolence of contingent co-worker | Integrity of contingent co-worker   | 7.6                     | 18.8            | -36.4               | 51.6  |

*Note.* Some values under the SE, lower and upper columns were rounded up for display purposes only. Table template adapted from “Antecedents of Trust in Supervisors, Subordinates, and Peers”. By Knoll, D, L., and Gill, H.(2011). *Journal of Managerial Psychology*, 26 (4), p.323.

<sup>a</sup>Difference between relative weights. <sup>b</sup>SE = standard error of the difference between relative weights.

\* $p < .05$ . Experiment-wise.

Table 6.17: Confidence intervals around all pairwise differences between relative weights for the dependent variable trust in contingent co-worker (n=200)

| Predictor 1                         | Predictor 2                         | Difference <sup>a</sup> | SE <sup>b</sup> | Confidence interval |       |
|-------------------------------------|-------------------------------------|-------------------------|-----------------|---------------------|-------|
|                                     |                                     |                         |                 | Lower               | Upper |
| Ability of contingent co-worker     | Benevolence of contingent co-worker | -12.1                   | 10.0            | -35.5               | 11.3  |
| Ability of contingent co-worker     | Integrity of contingent co-worker   | 1.8                     | 10.2            | -22.0               | 25.6  |
| Benevolence of contingent co-worker | Integrity of contingent co-worker   | 13.9                    | 7.69            | -4.09               | 31.9  |

*Note.* Some values under the SE, lower and upper columns were rounded up for display purposes only. Table template adapted from “Antecedents of Trust in Supervisors, Subordinates, and Peers”. By Knoll, D, L., and Gill, H.(2011). *Journal of Managerial Psychology*, 26 (4), p.323.

<sup>a</sup>Difference between relative weights. <sup>b</sup>SE = standard error of the difference between relative weights.

\* $p < .05$ . Experiment-wise.

As for the antecedents of trust in permanent co-worker, table 6.18 shows that all regression models were significant.  $F(3, 150) = 56.842, p < .001$  for sample 1.  $F(3, 42) = 6.085, p < .01$  for sample 2 and  $F(3, 196) = 52.477, p < .001$  for sample 3.

As shown in table 6.18, for sample 1, the three perceived trustworthiness components of the permanent co-worker together explained 53.2% of the variance in trust in a permanent co-worker. Of this 53.2% explained variance, benevolence accounted for 38.6%, integrity for 32.5%, and 28.9% was attributed to ability. In sample 2, the explained variance by the three trustworthiness factors was 30.3% of the variance in trust in a permanent co-worker. Benevolence accounted for 42.6%, integrity for 34.9%, and ability for 22.5%. Finally, in sample 3, the three predictor variables together explained 44.5% of the variance in the dependent variable. Of this, benevolence accounted for 40.4%, integrity for 32.9%, and 26.7% was attributed to the ability of a permanent co-worker.



Table 6.18: Relative importance indices from standard multiple regression and relative weight analyses for trust in permanent co-worker (n=154, 46, 200)

| Predictor variables                | Relative Importance Indices |        |         |                 |      |      |            |      |      |
|------------------------------------|-----------------------------|--------|---------|-----------------|------|------|------------|------|------|
|                                    | $\beta^a$                   |        |         | $\varepsilon^b$ |      |      | $(sr^2)^c$ |      |      |
| Ability of permanent co-worker     | .227**                      | .083   | .175*   | 28.9            | 22.5 | 26.7 | .026       | .003 | .015 |
| Benevolence of permanent co-worker | .362***                     | .344   | .365*** | 38.6            | 42.6 | 40.4 | .048       | .027 | .042 |
| Integrity of permanent co-worker   | .221*                       | .159   | .190    | 32.5            | 34.9 | 32.9 | .016       | .005 | .010 |
| $R^2$                              | .532***                     | .303** | .445*** |                 |      |      |            |      |      |
| n <sup>d</sup>                     | 154                         | 46     | 200     | 154             | 46   | 200  | 154        | 46   | 200  |

<sup>a</sup> $\beta$  =standardized coefficient (Beta). <sup>b</sup> $\varepsilon$  = epsilon statistic. <sup>c</sup> $sr^2$ = squared semi-partial correlation. <sup>d</sup>n= sample size.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Tables 6.19, 6.20 and 6.21 each present the confidence intervals around all pairwise differences between relative weights for trust in a permanent co-worker in samples 1, 2 and 3 respectively. Again, the confidence intervals for the difference between any two of these trustworthiness predictors also includes zero, thus indicating that the relative weights of any two of these predictors are not significantly different. Thus, H8b was again rejected in all three samples.

However, while the differences in the relative weights of the three predictors were not statistically significant in all three samples and for both trust in permanent and trust in contingent co-worker, the rank order of the relative importance indices (e.g. beta, relative weights and squared semi-partial correlations) displayed in tables 6.14 and 6.18 were consistent with the hypothesis in that benevolence explained a greater amount of variance in trust in the respective co-worker than that explained by the other two trustworthiness predictors.

Table 6.19: Confidence intervals around all pairwise differences between relative weights for the dependent variable trust in permanent co-worker (n=154)

| Predictor 1                        | Predictor 2                        | Difference <sup>a</sup> | SE <sup>b</sup> | Confidence interval |       |
|------------------------------------|------------------------------------|-------------------------|-----------------|---------------------|-------|
|                                    |                                    |                         |                 | Lower               | Upper |
| Ability of permanent co-worker     | Benevolence of permanent co-worker | -9.7                    | 8.21            | -28.9               | 9.50  |
| Ability of permanent co-worker     | Integrity of permanent co-worker   | -3.6                    | 7.12            | -20.3               | 13.1  |
| Benevolence of permanent co-worker | Integrity of permanent co-worker   | 6.1                     | 7.78            | -12.1               | 24.3  |

*Note.* Some values under the SE, lower and upper columns were rounded up for display purposes only. Table template adapted from “Antecedents of Trust in Supervisors, Subordinates, and Peers”. By Knoll, D, L., and Gill, H.(2011). *Journal of Managerial Psychology*, 26 (4), p.323.

<sup>a</sup>Difference between relative weights. <sup>b</sup>SE = standard error of the difference between relative weights.

\* $p < .05$ . Experiment-wise.

Table 6.20: Confidence intervals around all pairwise differences between relative weights for the dependent variable trust in permanent co-worker (n=46)

| Predictor 1                        | Predictor 2                        | Difference <sup>a</sup> | SE <sup>b</sup> | Confidence interval |       |
|------------------------------------|------------------------------------|-------------------------|-----------------|---------------------|-------|
|                                    |                                    |                         |                 | Lower               | Upper |
| Ability of permanent co-worker     | Benevolence of permanent co-worker | -20.1                   | 17.8            | -61.8               | 21.6  |
| Ability of permanent co-worker     | Integrity of permanent co-worker   | -12.4                   | 13.1            | -42.9               | 18.2  |
| Benevolence of permanent co-worker | Integrity of permanent co-worker   | 7.7                     | 15.5            | -28.5               | 43.9  |

*Note.* Some values under the SE, lower and upper columns were rounded up for display purposes only. Table template adapted from “Antecedents of Trust in Supervisors, Subordinates, and Peers”. By Knoll, D, L., and Gill, H.(2011). *Journal of Managerial Psychology*, 26 (4), p.323.

<sup>a</sup>Difference between relative weights. <sup>b</sup>SE = standard error of the difference between relative weights.

\* $p < .05$ . Experiment-wise.

Table 6.21: Confidence intervals around all pairwise differences between relative weights for the dependent variable trust in permanent co-worker (n=200)

| Predictor 1                        | Predictor 2                        | Difference <sup>a</sup> | SE <sup>b</sup> | Confidence interval |       |
|------------------------------------|------------------------------------|-------------------------|-----------------|---------------------|-------|
|                                    |                                    |                         |                 | Lower               | Upper |
| Ability of permanent co-worker     | Benevolence of permanent co-worker | -13.7                   | 7.89            | -32.2               | 4.78  |
| Ability of permanent co-worker     | Integrity of permanent co-worker   | -6.2                    | 6.19            | -20.7               | 8.28  |
| Benevolence of permanent co-worker | Integrity of permanent co-worker   | 7.5                     | 7.37            | -9.75               | 24.8  |

*Note.* Some values under the SE, lower and upper columns were rounded up for display purposes only. Table template adapted from “Antecedents of Trust in Supervisors, Subordinates, and Peers”. By Knoll, D, L., and Gill, H.(2011). *Journal of Managerial Psychology*, 26 (4), p.323.

<sup>a</sup>Difference between relative weights. <sup>b</sup>SE = standard error of the difference between relative weights.

\* $p < .05$ . Experiment-wise.

For example, in sample 1, the squared semi-partial correlations (table 6.14) show that benevolence accounted for 4.3% of the variance in the prediction of trust in a contingent co-worker over and above the variance accounted for by integrity and ability, followed by ability which accounted for 3.1% of the variance over and above that of benevolence and integrity. Finally integrity only accounted for 0.5% of the variance in the dependent variable over and above that of the other two predictors. This rank order also supports that suggested by the relative weights and beta coefficients produced from this sample.

#### 6.4.2.3.1 Summary

H8 was rejected in all three samples. The results indicate that there was no statistically significant difference between the three perceived trustworthiness factors in predicting the level of trust in the respective co-worker regardless of the employment status of the trustor and trustee. However there is an indication from the (non-significant) measures of relative importance that benevolence was a more important predictor of trust than integrity or ability.

#### **6.4.2.4 Relationship between Trust in Different Referent Types**

H9 states that there is a positive relationship between trust in a contingent co-worker and trust in a permanent co-worker. This hypothesis is initially supported by correlations reported in tables 6.4, 6.5 and 6.6 which indicate that trust in a permanent co-worker was positively and significantly correlated with trust in a contingent co-worker in the three samples.

##### **6.4.2.4.1 Trust in Contingent Co-worker as Dependent Variable**

For the relationship between ‘trust in a contingent co-worker’ and ‘trust in permanent co-worker’, at first, trust in contingent co-worker was treated as the dependent variable (please refer to table 6.22). In samples 1 and 3, trust climate and propensity to trust were controlled for in step1, however these variables were not controlled for in sample 2. Both variables explained 5.2% (adjusted R square = 3.9%) and 5.5% (adjusted R square = 4.6%) of the variance in ‘trust in contingent co-worker’ in samples 1 and 3 respectively.

For step 2, trustworthiness factors were entered and explained an additional 44.2% (sample 1) and 34.5% (sample 2) of variance in the dependent variable. Lastly, trust in a permanent co-worker was entered at step 3 and explained an additional 3.4% (sample 1) and 5.9% (sample 3) of the variance in trust in a contingent co-worker, after controlling for the 5 variables entered at step 1 and 2 in each sample. In sample 1,  $R$  squared change = .034,  $F$  change (1, 147) = 10.521,  $p$  = .001. In sample 3,  $R$  squared change = .059,  $F$  change (1, 193) = 21.031,  $p$  < .001.

In sample 1, the total variance explained by the model was 52.7% (adjusted R square = 50.8%), and the model was significant,  $F$  (6, 147) = 27.334,  $p$  < .001. In sample 3, the total variance explained by the model was 46% (adjusted R square = 44.3%), and the model was also significant,  $F$  (6, 193) = 27.351,  $p$  < .001.

As for sample 2, the perceived ability, benevolence and integrity of the contingent co-worker entered at step 1 (please refer to table 6.22) explained 24.1% (adjusted R square = 18.7%) of the variance in ‘trust in contingent co-worker’. for step 2, trust in a permanent co-worker explained an additional 12.1% of the variance, after controlling for the three trustworthiness factors entered at step 1,  $R$  squared change = .121,  $F$  change (1, 41) = 7.773,  $p$  < .01.

Table 6.22: Hierarchical regression analysis examining relations between trust in different referents #1, trust in contingent co-worker as dependent variable. (n=154, 46, 200)

| Predictor                           | Samples      |         |              |         |              |         |
|-------------------------------------|--------------|---------|--------------|---------|--------------|---------|
|                                     | 1            |         | 2            |         | 3            |         |
|                                     | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ |
| Step 1                              | .052         |         |              |         | .055         |         |
| Control variables <sup>a</sup>      |              | –       |              |         |              | –       |
| Step 2 <sup>b</sup>                 | .442         |         | .241         |         | .345         |         |
| Propensity to trust                 |              | .004    |              |         |              | .059    |
| Trust climate                       |              | -.016   |              |         |              | -.074   |
| Ability of contingent co-worker     |              | .257**  |              | -.016   |              | .183*   |
| Benevolence of contingent co-worker |              | .388**  |              | .391    |              | .428*** |
| Integrity of contingent co-worker   |              | .129    |              | .124    |              | .071    |
| Step 3 <sup>c</sup>                 | .034         |         | .121         |         | .059         |         |
| Propensity to trust                 |              | -.011   |              |         |              | .033    |
| Trust climate                       |              | -.002   |              |         |              | -.059   |
| Ability of contingent co-worker     |              | .206*   |              | -.054   |              | .127    |
| Benevolence of contingent co-worker |              | .409*** |              | .374    |              | .454*** |
| Integrity of contingent co-worker   |              | .062    |              | .110    |              | .006    |
| Trust in permanent co-worker        |              | .205**  |              | .354**  |              | .261*** |
| Total R <sup>2</sup>                | .527***      |         | .362**       |         | .460***      |         |
| n                                   | 154          |         | 46           |         | 200          |         |

*Note.* A dash (-) in a cell means data are not reported. An empty cell means data are not applicable. Table template adapted from “Publication Manual of the American Psychological Association” (2010), p. 145.

<sup>a</sup>Control variables for n=154 and n=200 include trust climate and propensity to trust, however, these two variables were not controlled for in n=46. <sup>b</sup>Step 2 is step 1 for n=46. <sup>c</sup>Step 3 is step 2 for n=46.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

The total variance explained by the model as a whole was 36.2% (adjusted R square = 30%), and the model was significant,  $F(4, 41) = 5.816, p < .01$ .

As shown in table 6.22, in the final model, trust in permanent co-worker ( $\beta = .205, p = .001$ ), ( $\beta = .354, p < .01$ ) and ( $\beta = .261, p < .001$ ) in samples 1, 2 and 3 respectively, was statistically significant, thus supporting H9 in all three samples.

#### **6.4.2.4.2 Trust in Permanent Co-worker as Dependant Variable**

When treating trust in permanent co-worker as the dependent variable, table 6.23 shows that in samples 1 and 3, propensity to trust was controlled for in step1, however this variable was not controlled for in sample 2. Propensity to trust explained 3.1% (adjusted R square = 2.5%) and 3.8% (adjusted R square = 3.3%) of the variance in 'trust in permanent co-worker' in samples 1 and 3 respectively. In step 2, the three trustworthiness components were entered and explained an additional 50.1% (sample 1) and 40.7% (sample 3) of the variance.

At step 3, trust in a contingent co-worker was entered and explained an additional 4.5% (sample 1) and 5.3% (sample 3) of the variance in trust in a permanent co-worker, after controlling for the 4 variables entered at step 1 and 2. In sample 1,  $R$  squared change = .045,  $F$  change (1, 148) = 15.757,  $p < .001$ . In sample 3,  $R$  squared change = .053,  $F$  change (1, 194) = 20.625,  $p < .001$ .

In sample 1, the total variance explained by the model was 57.7% (adjusted R square = 56.3%). the model was significant,  $F(5, 148) = 40.403, p < .001$ . In sample 3, the total variance explained by the model as a whole was 49.9% (adjusted R square = 48.6%). the model was significant,  $F(5, 194) = 38.604, p < .001$ .

As for sample 2, the three trustworthiness variables entered at step 1 explained 30.3% (adjusted R square = 25.3%) of the variance in 'trust in permanent co-worker'. In step 2, trust in a contingent co-worker explained an additional 9.1% of the variance in trust in a permanent co-worker, after controlling for trustworthiness factors,  $R$  squared change = .091,  $F$  change (1, 41) = 6.158,  $p < .05$ . the total variance explained by the model as a whole was 39.4% (adjusted R square = 33.5%). the model was significant,  $F(4, 41) = 6.664, p < .001$ .

Table 6.23: Hierarchical regression analysis examining relations between trust in different referents #2, trust in permanent co-worker as dependent variable. (n=154, 46, 200)

| Predictor                          | Samples      |         |              |         |              |         |
|------------------------------------|--------------|---------|--------------|---------|--------------|---------|
|                                    | 1            |         | 2            |         | 3            |         |
|                                    | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ |
| Step 1                             | .031         |         |              |         | .038         |         |
| Propensity to trust <sup>a</sup>   |              | .177*   |              |         |              | .195**  |
| Step 2 <sup>b</sup>                | .501         |         | .303         |         | .407         |         |
| Propensity to trust                |              | -.012   |              |         |              | -.002   |
| Ability of permanent co-worker     |              | .226**  |              | .083    |              | .176*   |
| Benevolence of permanent co-worker |              | .364*** |              | .344    |              | .365*** |
| Integrity of permanent co-worker   |              | .223*   |              | .159    |              | .191    |
| Step 3 <sup>c</sup>                | .045         |         | .091         |         | .053         |         |
| Propensity to trust                |              | -.035   |              |         |              | -.038   |
| Ability of permanent co-worker     |              | .259**  |              | -.066   |              | .175*   |
| Benevolence of permanent co-worker |              | .295**  |              | .323    |              | .312**  |
| Integrity of permanent co-worker   |              | .182    |              | .211    |              | .172    |
| Trust in contingent co-worker      |              | .232*** |              | .328*   |              | .247*** |
| Total R <sup>2</sup>               | .577***      |         | .394***      |         | .499***      |         |
| n                                  | 154          |         | 46           |         | 200          |         |

*Note.* An empty cell means data are not applicable. Table template adapted from “Publication Manual of the American Psychological Association” (2010), p. 145.

<sup>a</sup>Propensity to trust was controlled for in step 1 for n=154 and n=200 but not for n=46. <sup>b</sup>Step 2 is step 1 for n=46. <sup>c</sup>Step 3 is step 2 for n=46.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

As shown in table 6.23, in the final model, trust in permanent co-worker ( $\beta = .232, p < .001$ ), ( $\beta = .328, p < .05$ ) and ( $\beta = .247, p < .001$ ) in samples 1, 2 and 3 respectively, was statistically significant, thus H9 was supported again in all three samples.

#### **6.4.2.4.3 Summary**

H9 was supported in each of the three samples. Results show that trust in a permanent co-worker was positively and significantly related to trust in a contingent co-worker and vice-versa whether the trustor was a permanent employee, contingent employee or an employee in general.

#### **6.4.2.5 Trust in Co-worker and its Behavioural Outcomes**

Hierarchical multiple regression was also used to assess the ability of trust in co-worker to predict levels of the proposed behavioural outcomes of trust, after controlling for those variables that are significantly correlated with the respective dependent variable and theoretically linked to the variable of interest. The proposed behavioural outcomes examined are: antisocial work behaviours towards the respective co-worker and person/task-focused interpersonal citizenship behaviours towards the respective co-worker.

##### **6.4.2.5.1 Trust in Co-worker and Antisocial Work Behaviours**

H10 states that there is a significant negative relationship between trust in the respective co-worker and antisocial work behaviours towards (a) the contingent co-worker, and (b) the permanent co-worker. Tables 6.4, 6.5 and 6.6 show that in the three samples, correlations between trust and antisocial work behaviours provide initial support for this hypothesis only in the case where the permanent employee, and not the contingent employee is the referent of trust.

##### **6.4.2.5.1.1 Antisocial Work Behaviours towards Contingent Co-worker**

For ‘antisocial work behaviours towards a contingent co-worker’, (please refer to table 6.24). In sample 1, age, gender and organisational tenure were entered at step 1, explaining 6.2% (adjusted R square = 4.3%) then trust climate was entered at step 2, explaining an additional 4% of the variance in the dependent variable and lastly, trust in contingent co-worker entered at step 3 explained an additional 0.2% of the variance



after controlling for the four control variables,  $R$  squared change = .002,  $F$  change (1, 148) = .413, *not significant*.

Table 6.24: Hierarchical regression analysis examining antecedents to antisocial work behaviours towards contingent co-worker (n=154, 46, 200)

| Predictor                     | Samples      |         |              |         |              |         |
|-------------------------------|--------------|---------|--------------|---------|--------------|---------|
|                               | 1            |         | 2            |         | 3            |         |
|                               | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ |
| Step 1                        | .062         |         |              |         |              |         |
| Age                           |              | .014    |              |         |              |         |
| Gender                        |              | -.179*  |              |         |              |         |
| Organisational tenure         |              | .139    |              |         |              |         |
| Step 2 <sup>a</sup>           | .040         |         | .139         |         | .036         |         |
| Age                           |              | .008    |              |         |              |         |
| Gender                        |              | -.185*  |              |         |              |         |
| Organisational tenure         |              | .140    |              | .373*   |              |         |
| Trust climate                 |              | -.200*  |              |         |              | -.191** |
| Step 3 <sup>b</sup>           | .002         |         | .006         |         | .000         |         |
| Age                           |              | .002    |              |         |              |         |
| Gender                        |              | -.194*  |              |         |              |         |
| Organisational tenure         |              | .139    |              | .358*   |              |         |
| Trust climate                 |              | -.210** |              |         |              | -.190** |
| Trust in contingent co-worker |              | .052    |              | -.079   |              | -.006   |
| Total $R^2$                   | .104**       |         | .145*        |         | .037*        |         |
| $n$                           | 154          |         | 46           |         | 200          |         |

*Note.* An empty cell means data are not applicable. Table template adapted from “Publication Manual of the American Psychological Association” (2010), p. 145.

<sup>a</sup>Step 2 is step 1 for n= 46 and n=200. <sup>b</sup>Step 3 is step 2 for n= 46 and n=200.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

In sample 2, organisational tenure was entered at step 1 explaining 13.9% (adjusted R square = 12%) of the variance in the dependent variable and an additional 0.6% of the variance was explained by trust in contingent co-worker (step 2) while controlling for organisational tenure,  $R$  squared change = .006,  $F$  change (1, 43) = .302,  $p$  = .585.

As for sample 3, trust climate was entered at step 1 and explained 3.6% (adjusted R square = 3.2%) of the variance and no additional variance was explained by trust in contingent co-worker (step 2) while controlling trust climate,  $R$  squared change = .000,  $F$  change (1, 197) = .006,  $p$  = .937.

The total variance explained by each final model in each sample was as follows: in sample 1, 10.4% (adjusted R square = 7.4%), and the model was significant,  $F$  (5, 148) = 3.451,  $p$  < .01. In sample 2, 14.5% (adjusted R square = 10.6%) and the final model was also significant,  $F$  (2, 43) = 3.658,  $p$  < .5. lastly, in sample 3, 3.7% (adjusted R square = 2.7%) and the model was again significant,  $F$  (2, 197) = 3.735,  $p$  < .05.

*H10a* was not supported in any of the three samples since in sample 1, only gender ( $\beta$  = -.194,  $p$  < .05) and trust climate ( $\beta$  = -.210,  $p$  < .01) were statistically significant, in sample 2, only tenure ( $\beta$  = .358,  $p$  < .05) was statistically significant and finally, in sample 3, only trust climate ( $\beta$  = -.190,  $p$  < .01) was statistically significant in the final model and had a negative relationship with the dependent variable.

#### **6.4.2.5.1.2 Antisocial Work Behaviours towards Permanent Co-worker**

For antisocial work behaviours and where the permanent co-worker is the referent of trust, no variables were controlled for in the model in sample 1 (table 6.25). The total variance explained by the model as a whole was 4.8% (adjusted R square = 4.2%), and the model was significant,  $F$  (1, 152) = 7.632,  $p$  < .01. for the other two samples, trust climate was controlled for at step 1 and explained 15.4% (adjusted R square = 13.5%) and 2.8% (adjusted R square = 2.3%) of the variance in the dependent variable in samples 2 and 3 respectively (please refer to table 6.25).

Trust in permanent co-worker (step 2) explained an additional 6% and 5.2% of the variance in the dependent variable in samples 2 and 3 respectively, after controlling for trust climate. In sample 2,  $R$  squared change = .060,  $F$  change (1, 43) = 3.265,  $ns$ . In sample 3,  $R$  squared change = .052,  $F$  change (1, 197) = 11.200,  $p$  = .001. The total

variance explained by the model as a whole in sample 2 was 21.4% (adjusted R square = 17.7%), and the model was significant,  $F(2, 43) = 5.845, p < .05$ . In sample 3, 8% (adjusted R square = 7.1%) was explained by the model as a whole, and the model was significant,  $F(2, 197) = 8.582, p < .001$ .

As shown in table 6.25, *H10b* was only supported in sample 1 and 3 since in sample 1, trust in a permanent co-worker in sample 1 ( $\beta = -.219, p < .01$ ) and in sample 3 ( $\beta = -.138, p < .05$ ) was significantly related to antisocial work behaviours towards a permanent co-worker. Contrary to the case where the contingent co-worker is referent, trust in permanent co-worker was negatively and significantly related to antisocial work behaviours to that permanent co-worker. However, *H10b* was not supported in sample 2 since only trust climate ( $\beta = -.338, p < .05$ ) was statistically significant in the final model.

Table 6.25: Hierarchical regression analysis examining antecedents to antisocial work behaviours towards permanent co-worker (n=154, 46, 200)

| Predictor                      | Samples      |         |              |         |              |         |
|--------------------------------|--------------|---------|--------------|---------|--------------|---------|
|                                | 1            |         | 2            |         | 3            |         |
|                                | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ |
| Step 1                         |              |         | .154         |         | .028         |         |
| Control variables <sup>a</sup> |              |         |              | -.392** |              | -.167*  |
| Step 2 <sup>b</sup>            | .048         |         | .060         |         | .052         |         |
| Trust climate                  |              |         |              | -.338*  |              | -.138*  |
| Trust in permanent co-worker   |              | -.219** |              | -.250   |              | -.230** |
| Total R <sup>2</sup>           | .048**       |         | .214**       |         | .080***      |         |
| <i>n</i>                       | 154          |         | 46           |         | 200          |         |

*Note.* An empty cell means data are not applicable. Table template adapted from “Publication Manual of the American Psychological Association” (2010), p. 145.

<sup>a</sup>Control variables for n=46 and n=200 include trust climate, however, this variable was not controlled for in n=154. <sup>b</sup>Step 2 is step 1 for n= 154.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

#### **6.4.2.5.1.3 Summary**

H10 was supported in the permanent employee sample and the combined sample only when the trustee is a permanent co-worker. These results indicate that a negative relationship between trust and antisocial work behaviours only applies when the trustor is either a permanent employee or an employee in general and when the trustee is a permanent co-worker.

Furthermore, it should be noted that the absence of significant results supporting H10 in the contingent employee sample might be attributed (as noted at the beginning of the regression analyses section) to the small size of this sample limitation and the impact that has on reducing the statistical power of the regression test and thus, limiting the ability of the test to produce significant results to support H10 in this sample.

#### **6.4.2.5.2 Trust in Co-worker and Person-Focused ICB**

H11 states that there is a significant positive relation between trust in the respective co-worker and *Person*-focused ICB towards (a) the contingent co-worker, (b) the permanent co-worker. Correlations reported in tables 6.4, 6.5 and 6.6 provide initial support for H11.

##### **6.4.2.5.2.1 Person-Focused ICB towards Contingent Co-worker**

For person-focused ICB, with the contingent co-worker as the referent of trust, (please refer to table 6.26), in sample 1, trust climate when entered at step 1 explained 7.8% (adjusted R square = 7.2%) of the variance then trust in contingent co-worker was entered at step 2 and explained an additional 37.2% of the variance in the dependent variable, after controlling for trust climate,  $R$  squared change = .372,  $F$  change (1, 151) = 102.087,  $p < .001$ . In sample 3, trust climate and education level also entered at step 1 explained 11.6% (adjusted R square = 10.7%) of the variance in the dependent variable then trust in contingent co-worker (entered at step 2) explained an additional 36.9% of the variance in the dependent variable, after controlling the two control variables,  $R$  squared change = .369,  $F$  change (1, 196) = 140.134,  $p < .001$ . In both sample, the model as a whole was significant  $F$  (2, 151) = 61.762,  $p < .001$  (sample 1),  $F$  (3, 196) = 61.367,  $p < .001$  (sample 3). The total variance explained by each model as a whole was 45% (adjusted R square = 44.3%) in sample 1 and 48.4% (adjusted R square = 47.6%) in sample 3. As for sample 2, no variables were controlled for. ‘Trust in contingent co-

worker' was entered at step 1 and explained 41.2% (adjusted R square = 39.9%) of the variance in the dependent variable and the model was significant,  $F$  change (1, 44) = 30.835,  $p < .001$ .

Examination of the beta coefficients in the final model (please refer to table 6.26) shows that in sample 1, trust in contingent co-worker ( $\beta = .623$ ,  $p < .001$ ) and trust climate ( $\beta = .154$ ,  $p < .05$ ) were statistically significant. Trust in contingent co-worker ( $\beta = .642$ ,  $p < .001$ ) was also significant in sample 2. Lastly, in sample 3, trust climate ( $\beta = .167$ ,  $p < .01$ ) and trust in contingent co-worker ( $\beta = .618$ ,  $p < .001$ ) were significant and education level ( $\beta = -.175$ ,  $p < .01$ ) was negatively and significantly related to the outcome variable. Consequently, *H11a* was supported in all three samples.

Table 6.26: Hierarchical regression analysis examining antecedents to person-focused ICB towards contingent co-worker (n=154, 46, 200)

| Predictor                     | Samples      |         |              |         |              |         |
|-------------------------------|--------------|---------|--------------|---------|--------------|---------|
|                               | 1            |         | 2            |         | 3            |         |
|                               | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ |
| Step 1                        | .078         |         |              |         | .116         |         |
| Trust climate                 |              | .279*** |              |         |              | .280*** |
| Education level               |              |         |              |         |              | -.196** |
| Step 2 <sup>a</sup>           | .372         |         | .412         |         | .369         |         |
| Trust climate                 |              | .154*   |              |         |              | .167**  |
| Education level               |              |         |              |         |              | -.175** |
| Trust in contingent co-worker |              | .623*** |              | .642*** |              | .618*** |
| Total R <sup>2</sup>          | .450***      |         | .412***      |         | .484***      |         |
| <i>n</i>                      | 154          |         | 46           |         | 200          |         |

*Note.* An empty cell means data are not applicable.. Table template adapted from "Publication Manual of the American Psychological Association" (2010), p. 145.

<sup>a</sup>Step 2 is step 1 for n= 46.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

#### 6.4.2.5.2.2 Person-Focused ICB towards Permanent Co-worker

When the referent of trust and person-focused ICB is the permanent co-worker (table 6.27), age and organisational tenure were controlled for in sample 1 and explained 3.2% (adjusted R square = 1.9%) of variance while trust climate and education level were controlled for in sample 3 and explained 4.8% (adjusted R square = 3.8%) of the variance in ‘person-focused ICB towards a permanent co-worker.

Table 6.27: Hierarchical regression analysis examining antecedents to person-focused ICB towards permanent co-worker (n=154, 46, 200)

| Predictor                    | Samples      |         |              |         |              |         |
|------------------------------|--------------|---------|--------------|---------|--------------|---------|
|                              | 1            |         | 2            |         | 3            |         |
|                              | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ |
| Step 1                       | .032         |         |              |         | .048         |         |
| Age                          |              | .093    |              |         |              |         |
| Organisational tenure        |              | .097    |              |         |              |         |
| Trust climate                |              |         |              |         | .162*        |         |
| Education level              |              |         |              |         | -.149*       |         |
| Step 2 <sup>a</sup>          | .418         |         | .621         |         | .454         |         |
| Age                          |              | .033    |              |         |              |         |
| Organisational tenure        |              | .079    |              |         |              |         |
| Trust climate                |              |         |              |         | .077         |         |
| Education level              |              |         |              |         | -.108*       |         |
| Trust in permanent co-worker |              | .651*** |              | .788*** |              | .680*** |
| Total R <sup>2</sup>         | .451***      |         | .621***      |         | .502***      |         |
| <i>n</i>                     | 154          |         | 46           |         | 200          |         |

*Note.* An empty cell means data are not applicable. Table template adapted from “Publication Manual of the American Psychological Association” (2010), p. 145.

<sup>a</sup>Step 2 is step 1 for n= 46.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

In both samples, ‘trust in permanent co-worker’ was entered at step 2 explaining an additional 41.8% (sample 1) and 45.4% (sample 3) of the variance after controlling for the two variables entered at step 1 in each of these samples. In sample 1,  $R$  squared change = .418,  $F$  change (1, 150) = 114.283,  $p < .001$ , while in sample 3,  $R$  squared change = .454,  $F$  change (1, 196) = 178.744,  $p < .001$ .

Both final models were significant,  $F$  (3, 150) = 41.032,  $p < .001$  (sample 1) and  $F$  (3, 196) = 65.849,  $p < .001$  (sample 3). Total variance explained by each final model within each sample was 45.1% (adjusted  $R$  square = 44%) in sample 1 and 50.2% (adjusted  $R$  square = 49.4%) in sample 3. As for sample 2, no variables were controlled for. As reported in table 6.27, trust in permanent co-worker (step 1) explained 62.1% (adjusted  $R$  square = 61.2%) of the variance in the dependent variable. The model was significant  $F$  (1, 44) = 72.014,  $p < .001$ .

In the final model for sample 1 only trust in permanent co-worker ( $beta = .651$ ,  $p < .001$ ) was statistically significant. Similarly, in sample 2, trust in permanent co-worker ( $beta = .788$ ,  $p < .001$ ) was also significant. Finally, in sample 3, only education level ( $beta = -.108$ ,  $p < .05$ ) and trust in permanent co-worker ( $beta = .680$ ,  $p < .001$ ) significantly contributed to person-focused ICB towards a permanent co-worker. As a result, *H11b* is supported in all three samples.

#### **6.4.2.5.2.3 Summary**

H11 was supported in all three samples, indicating that trust in a respective co-worker was a significant predictor of person-focused ICB towards that co-worker regardless of the employment status of the trustor and referent of behaviour.

#### **6.4.2.5.3 Trust in Co-worker and Task-Focused ICB**

H12 proposes that there is a significant positive correlation between trust in the respective co-worker and *Task*-focused ICB towards (a) the contingent co-worker, (b) the permanent co-worker. Correlations reported in tables 6.4, 6.5 and 6.6 provide preliminary support to H12.

##### **6.4.2.5.3.1 Task-Focused ICB towards Contingent Co-worker**

For the dependent variable ‘task-focused ICB towards contingent co-worker’, table 6.28 shows that trust climate and education level were entered at step 1 and explained 11.1%

(adjusted R square = 9.9%) and 10.5% (adjusted R square = 9.6%) of the variance in the dependent variables in samples 1 and 3 respectively. Trust in contingent co-worker (step 2) explained an additional 23.3% (sample 1) and 22.8% (sample 3) of the variance in the dependent variable, after controlling for the two variables entered at step 1. In sample 1,  $R$  squared change = .232,  $F$  change (1, 150) = 53.018,  $p < .001$ . In sample 3,  $R$  squared change = .228,  $F$  change (1, 196) = 66.928,  $p < .001$ . Both final models were significant,  $F$  (3, 150) = 26.112,  $p < .001$  (sample 1),  $F$  (3, 196) = 32.631,  $p < .001$  (sample 3), and the total variance explained by each model as a whole was 34.3% (adjusted R square = 33%) and 33.3% (adjusted R square = 32.3%) in samples 1 and 3 respectively.

Table 6.28 Hierarchical regression analysis examining antecedents to task-focused ICB towards contingent co-worker (n=46)

| Predictor                     | Samples      |          |              |         |              |          |
|-------------------------------|--------------|----------|--------------|---------|--------------|----------|
|                               | 1            |          | 2            |         | 3            |          |
|                               | $\Delta R^2$ | $\beta$  | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$  |
| Step 1                        | .111         |          |              |         | .105         |          |
| Trust climate                 |              | .236**   |              |         |              | .233**   |
| Education level               |              | -.248**  |              |         |              | -.229**  |
| Step 2 <sup>a</sup>           | .232         |          | .251         |         | .228         |          |
| Trust climate                 |              | .137*    |              |         |              | .144*    |
| Education level               |              | -.245*** |              |         |              | -.212*** |
| Trust in contingent co-worker |              | .492***  |              | .501*** |              | .486***  |
| Total R <sup>2</sup>          | .343***      |          | .251***      |         | .333***      |          |
| <i>n</i>                      | 154          |          | 46           |         | 200          |          |

*Note.* An empty cell means data are not applicable. Table template adapted from “Publication Manual of the American Psychological Association” (2010), p. 145.

<sup>a</sup>Step 2 is step 1 for n= 46.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

For sample 2, no variables were controlled. Trust in contingent co-worker (step 1) explained 25.1% (adjusted R square = 23.4%) of the variance in ‘task-focused ICB



towards contingent co-worker'. The final model was also significant  $F(1, 44) = 14.742$ ,  $p < .001$ .

Finally, as shown in table 6.28, in the final model of sample 1, the beta coefficients for trust in contingent co-worker ( $\beta = .492$ ,  $p < .001$ ) and trust climate ( $\beta = .137$ ,  $p < .05$ ) indicate significant contributions to the dependent variable. Moreover, education level ( $\beta = -.245$ ,  $p < .001$ ) had a negative and significant contribution to task-focused ICB towards a contingent co-worker. In the final model of sample 2, trust in contingent co-worker ( $\beta = .501$ ,  $p < .001$ ) was statistically significant again providing support for *H12a*. As for the final model in sample 3, education level ( $\beta = -.212$ ,  $p < .001$ ) was negatively and significantly related to the outcome variable. Furthermore, trust climate ( $\beta = .144$ ,  $p < .05$ ), and trust in contingent co-worker ( $\beta = .486$ ,  $p < .001$ ) were positively and significantly related to task-focused ICB towards a contingent co-worker. Based on the results from the three samples, *H12a* is supported in all three samples.

#### **6.4.2.5.3.2 Task-Focused ICB towards Permanent Co-worker**

As for 'task-focused ICB towards a permanent co-worker', table 6.29 shows that no variables were controlled for in this analysis. Trust in permanent co-worker explained a total of 33.8% (adjusted R square = 33.4%), 45.9% (adjusted R square = 44.6%) and 37% (adjusted R square = 36.7%) of the variance in the dependent variable in samples 1, 2 and 3 respectively.

The three models were all significant,  $F(1, 152) = 77.586$ ,  $p < .001$  (sample 1),  $F(1, 44) = 37.280$ ,  $p < .001$  (sample 2) and  $F(1, 198) = 116.533$ ,  $p < .001$  (sample 3) and in these model, the beta coefficients for trust in permanent co-worker ( $\beta = .581$ ,  $p < .001$ ), ( $\beta = .677$ ,  $p < .001$ ) and ( $\beta = .609$ ,  $p < .001$ ) in samples 1, 2 and 3 respectively had statistically significant and positive contributions to the dependent variable. Therefore, *H12b* was supported in all three samples.

#### **6.4.2.5.3.3 Summary**

H12 was also supported in all three samples. The results indicate that trust in a respective co-worker was a significant predictor of task focused ICB towards that respective co-worker regardless of the employment status of the trustor and the referent of behaviour.

Table 6.29: Hierarchical regression analysis examining antecedents to task-focused ICB towards permanent co-worker (n=154, 46, 200)

| Predictor                    | Samples      |         |              |         |              |         |
|------------------------------|--------------|---------|--------------|---------|--------------|---------|
|                              | 1            |         | 2            |         | 3            |         |
|                              | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ | $\Delta R^2$ | $\beta$ |
| Step 1                       | .338         |         | .459         |         | .370         |         |
| Trust in permanent co-worker |              | .581*** |              | .677*** |              | .609*** |
| Total R <sup>2</sup>         | .338***      |         | .459***      |         | .370***      |         |
| n                            | 154          |         | 46           |         | 200          |         |

*Note.* Table template adapted from “Publication Manual of the American Psychological Association” (2010), p. 145.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

#### 6.4.2.6 The Strength of Relations between Trust and the Two Forms of ICB

H13 proposes that trust in the respective co-worker will be more strongly related to *Person*-focused ICB than to *Task*-focused ICB towards (a) the contingent co-worker, (b) the permanent co-worker. Examination of the correlations reported in tables 6.4, 6.5 and 6.6 shows that trust in the contingent co-worker was more strongly related to person focused ICB towards the contingent co-worker than to task focused ICB towards that same co-worker, providing initial support for H13a. Similarly, the three tables also show that trust in a permanent co-worker was more strongly correlated with person-focused ICB towards the permanent co-worker than task focused ICB towards the permanent co-worker, again in support of H13b.

##### 6.4.2.6.1 Summary

These results indicate that regardless of the employment status of the trustor, trust in a respective co-worker was more strongly related to person-focused ICB towards that co-worker than to task-focused ICB.

### **6.4.3 Paired Sample t-test**

The following section uses data from each of the three samples to test hypotheses 14, 15 and 16 using a paired sample t-test. It should be noted that given the small size of the contingent employee sample (n=46) (a limitation discussed in the chapter eight) and its impact on reducing the statistical power of the paired sample t-test, results of testing these three core hypotheses using data from the contingent employee sample may lead to insignificant results that may not reflect the reality of the hypothesized relationships in this sample. Thus, the results of hypotheses testing using data from this contingent employee sample should be viewed in light of this limitation and should not be generalised beyond this sample.

#### **6.4.3.1 Differences in the Levels of Trust, its Antecedents and Outcomes towards In-Group and Out-Group Members**

H14 a, b and c state that there will be statistically significant differences between in-group and out-group members in terms of the levels of person-focused ICB, task-focused ICB and antisocial work behaviours (respectively) directed towards each group, with those directed towards the in-group member being higher than those directed towards the out-group member with the exception of antisocial work behaviours where an in-group member receives lower levels than the out-group member. Lastly, H15 and H16 similarly propose that there will be statistically significant differences between in-group and out-group members in terms of the levels of perceived trustworthiness and trust (respectively) directed towards each group, with those directed towards the in-group member being higher than those directed towards the out-group member.

Tables 6.30, 6.31, 6.32 and 6.33 present the results of the paired-samples t-test between the levels ICBs, antisocial work behaviours, perceived trustworthiness and trust directed towards an in-group member and levels of those directed towards an out-group member.

Examination of the mean scores reported in table 6.30 shows that in samples 1 and 3, permanent co-workers received from permanent employees (sample 1) and employees in general (sample 3) higher levels of perceived trustworthiness, perceived ability, perceived benevolence, perceived integrity, trust, antisocial work behaviours, person-focused and task-focused ICB's than those received by contingent co-workers.

Table 6.30: Paired samples t-test mean scores for compared variables (n=154, 46, 200)

| Variables   | Mean scores           |                       |                       |
|---|-----------------------|-----------------------|-----------------------|
|   | Sample 1 <sup>a</sup> | Sample 2 <sup>b</sup> | Sample 3 <sup>c</sup> |
| Perceived trustworthiness of contingent co-worker       | 3.5304                | 3.4742                | 3.5175                |
| Perceived trustworthiness of permanent co-worker        | 3.6489                | 3.5231                | 3.6200                |
| Ability of contingent co-worker                         | 3.6645                | 3.5942                | 3.6483                |
| Ability of permanent co-worker                          | 3.8474                | 3.7536                | 3.8258                |
| Benevolence of contingent co-worker                     | 3.3753                | 3.4522                | 3.3930                |
| Benevolence of permanent co-worker                      | 3.4481                | 3.3000                | 3.4140                |
| Integrity of contingent co-worker                       | 3.5247                | 3.3522                | 3.4850                |
| Integrity of permanent co-worker                        | 3.6117                | 3.4696                | 3.5790                |
| Trust in contingent co-worker                           | 3.0110                | 3.1913                | 3.0525                |
| Trust in permanent co-worker                            | 3.2883                | 3.1457                | 3.2555                |
| Antisocial work behaviours towards contingent co-worker | 1.7208                | 1.8116                | 1.7417                |
| Antisocial work behaviours towards permanent co-worker  | 1.7630                | 1.7464                | 1.7592                |
| Person-focused ICB towards contingent co-worker         | 3.2524                | 3.4783                | 3.3044                |
| Person-focused ICB towards permanent co-worker          | 3.5065                | 3.4429                | 3.4919                |
| Task-focused ICB towards contingent co-worker           | 2.9805                | 3.2065                | 3.0325                |
| Task-focused ICB towards permanent co-worker            | 3.3604                | 3.3188                | 3.3508                |

<sup>a</sup>Consists of 154 permanent employees. <sup>b</sup>Consists of 46 contingent employees. <sup>c</sup>Consists of 200 employees (both permanent and contingent).

Table 6.30 also shows that in sample 2 permanent co-workers received higher levels of perceived trustworthiness, perceived ability, perceived integrity, and task-focused ICB's from contingent employees than those received by contingent co-workers.

On the other hand, contingent co-workers received from contingent employees higher levels of perceived benevolence, trust, antisocial work behaviours, and person-focused ICB's, than those received by permanent co-workers. Though, as will be shown next in tables 6.31, 6.32 and 6.33, some of the mean score differences detected in table 6.30 were not statistically significant.

#### 6.4.3.1.1 Sample 1 (n= 154 Permanent Employees)

Table 6.31 shows that the mean difference between person-focused ICB towards a contingent co-worker and that towards a permanent co-worker was statistically significant,  $t(153) = -4.173, p < .001$  (two-tailed). The confidence interval of the mean difference ranged from  $-.37433$  to  $-.13379$ , and the effect size statistics was moderate to large (.10). As a result, *H14a* was supported.

Likewise, task-focused ICB towards a contingent co-worker mean score differed significantly from the mean score of task-focused ICB towards a permanent co-worker  $t(153) = -5.453, p < .001$  (two-tailed). The mean difference confidence interval ranged from  $-.51751$  to  $-.24223$ , and the effect size statistics was large (.16). Thus, *H14b* was supported.

On the other hand, *H14c* was not supported since there were no statistically significant differences between the mean scores of antisocial work behaviours towards contingent co-worker and towards permanent co-worker. In addition, table 6.30 shows that in-group members received higher levels of antisocial work behaviours than out-group members which is not consistent with the hypothesis.

Table 6.31 also shows that the difference between the mean score of the perceived trustworthiness of a contingent co-worker and the mean score of the perceived trustworthiness of a permanent co-worker was statistically significant,  $t(153) = -2.317, p < .05$  (two-tailed). The mean difference in trustworthiness was  $-.11851$  with a confidence interval ranging from  $-.21954$  to  $-.01748$ , and finally the eta squared statistics (.034) indicated a small to moderate effect size. These results provide support to *H15*.

However, when examining each trustworthiness component individually, table 6.31 shows that there were no statistically significant differences between the mean score of perceived benevolence of a contingent co-worker and the mean score of benevolence of a permanent co-worker, and between the mean scores of integrity of contingent co-worker and integrity of permanent co-worker. As for the perceived ability of co-worker, it was the only trustworthiness component that had a statistically significant difference ( $-.18290$ ) between the mean score of perceived ability of a permanent co-workers and the mean score of perceived ability of a contingent co-workers,  $t(153)$

= -3.155,  $p < .01$  (two-tailed). The confidence interval of the mean difference ranged from -.29745 to -.06835, and the eta squared statistics (.06) indicated a moderate effect size.

Table 6.31: Paired sample t-test, significance of the difference in mean values of the compared variables (n=154)

| Pair  | Mean difference | t      | df  | Sig. (2-tailed) | Eta squared (effect size) |
|---|-----------------|--------|-----|-----------------|---------------------------|
| Trustworthiness of contingent co-worker<br>Trustworthiness of permanent co-worker                                 | -.11851*        | -2.317 | 153 | .022            | .034                      |
| Ability of contingent co-worker<br>Ability of permanent co-worker   | -.18290**       | -3.155 | 153 | .002            | .06                       |
| Benevolence of contingent co-worker<br>Benevolence of permanent co-worker   | -.07273         | -1.136 | 153 | .258            | .01                       |
| Integrity of contingent co-worker<br>Integrity of permanent co-worker   | -.08701         | -1.388 | 153 | .167            | .012                      |
| Trust in contingent co-worker<br>Trust in permanent co-worker   | -.27727***      | -3.992 | 153 | .000            | .094                      |
| Antisocial work behaviours towards contingent co-worker<br>Antisocial work behaviours towards permanent co-worker | -.04221         | -.920  | 153 | .359            | .005                      |
| Person-focused ICB towards contingent co-worker<br>Person-focused ICB towards permanent co-worker                 | -.25406***      | -4.173 | 153 | .000            | .10                       |
| Task-focused ICB towards contingent co-worker<br>Task-focused ICB towards permanent co-worker                     | -.37987***      | -5.453 | 153 | .000            | .16                       |

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

Finally, as reported in Table 6.31, there is a statistically significant difference between the mean scores of trust in contingent and trust in permanent co-worker,  $t(153) = -3.992$ ,  $p < .001$  (two-tailed). The mean difference was -.27727 with a confidence

interval ranging from -.41450 to -.14004. Eta squared was (.094) indicating a moderate effect size. These results provide support to hypothesis *H16* in this sample.

#### 6.4.3.1.2 Sample 2 (n= 46 Contingent Employees)

Results presented in table 6.32 shows that none of the mean difference values detected in table 6.30 for the pairs of variables was statistically significant. Thus, *H14a*, *H14b*, *H14c*, *H15* and *H16* were not supported in this sample.

Table 6.32: Paired sample t-test, significance of the difference in mean values of the compared variables (n=46)

| Pair  | Mean difference | t      | df | Sig. (2-tailed) | Eta squared (effect size) |
|---|-----------------|--------|----|-----------------|---------------------------|
| Trustworthiness of contingent co-worker<br>Trustworthiness of permanent co-worker                                 | -.04891         | -.335  | 45 | .739            | .002                      |
| Ability of contingent co-worker<br>Ability of permanent co-worker   | -.15942         | -1.140 | 45 | .260            | .028                      |
| Benevolence of contingent co-worker<br>Benevolence of permanent co-worker   | .15217          | .810   | 45 | .422            | .014                      |
| Integrity of contingent co-worker<br>Integrity of permanent co-worker   | -.11739         | -.664  | 45 | .510            | .01                       |
| Trust in contingent co-worker<br>Trust in permanent co-worker   | .04565          | .331   | 45 | .742            | .002                      |
| Antisocial work behaviours towards contingent co-worker<br>Antisocial work behaviours towards permanent co-worker | .06522          | .617   | 45 | .540            | .008                      |
| Person-focused ICB towards contingent co-worker<br>Person-focused ICB towards permanent co-worker                 | .03533          | .292   | 45 | .771            | .002                      |
| Task-focused ICB towards contingent co-worker<br>Task-focused ICB towards permanent co-worker                     | -.11232         | -.828  | 45 | .412            | .015                      |

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

#### 6.4.3.1.3 Sample 3 (n= 200 Employees)

Hypothesis *H14a*, *H14b*, *H14c*, *H15* and *H16* can only be tested in a context where the study participant is classified as being a member of either a group of permanent employees or a group of contingent employees. Nonetheless, it was interesting to examine whether employees in general (both permanent and contingent) differentiate between their permanent and contingent co-workers in terms of the variables of interest in this study. Thus, the paired samples t-test was conducted using data collected from 200 employees who represent a mixture of permanent and contingent employees.

Again, results presented in table 6.33 show that not all of the differences detected in mean scores shown in table 6.30 were statistically significant. Person-focused ICB towards contingent co-worker and person-focused ICB towards permanent co-worker had a statistically significant mean difference (-.18750), and a confidence interval (from -.29600 to -.07900),  $t(199) = -3.408$ ,  $p = .001$  (two-tailed), and a small effect size reflected by the eta squared statistic (.055). Moreover, task-focused ICB towards a contingent co-worker and task-focused ICB towards a permanent co-worker also had a statistically significant mean difference (-.31833),  $t(199) = -3.408$ ,  $p < .001$  (two-tailed), and the confidence interval for the mean difference ranged from -.44138 to -.19529.

The eta squared statistic for this last pair (.115) indicated a moderate effect size. As for the variables, benevolence, integrity and antisocial work behaviours, the mean difference for each of these variables in their respective pairs (as presented in table 6.33) was not statistically significant. The mean difference (-.10250) between perceived trustworthiness of a contingent co-worker and perceived trustworthiness of a permanent co-worker was statistically significant,  $t(199) = -1.988$ ,  $p < .05$  (two-tailed), confidence interval ranging from -.20420 to -.00080. The eta squared statistics (.019) indicated a small effect size.

According to table 6.33, other pairs of variables that had a statistically significant mean difference were: ability of contingent co-worker and ability of permanent co-worker, with a mean difference (-.17750) and a confidence interval (from -.28566 to -.06934),  $t(199) = -3.236$ ,  $p = .001$  (two-tailed), and the eta squared statistic (.05) indicated a small effect size. Another pair of variables is trust in contingent co-worker and trust in a permanent co-worker, with a mean difference (-.20300) and a confidence interval (from



-.32674 to -.07926),  $t(199) = -3.235$ ,  $p = .001$  (two-tailed), and the eta squared statistic (.05) also indicating a small effect size.

Table 6.33: Paired sample t-test, significance of the difference in mean values of the compared variables (n=200)

| Pair  | Mean difference | t      | df  | Sig. (2-tailed) | Eta squared (effect size) |
|---|-----------------|--------|-----|-----------------|---------------------------|
| Trustworthiness of contingent co-worker<br>Trustworthiness of permanent co-worker                                 | -.10250*        | -1.988 | 199 | .048            | .019                      |
| Ability of contingent co-worker<br>Ability of permanent co-worker   | -.17750**       | -3.236 | 199 | .001            | .05                       |
| Benevolence of contingent co-worker<br>Benevolence of permanent co-worker   | -.02100         | -.320  | 199 | .749            | 5.14                      |
| Integrity of contingent co-worker<br>Integrity of permanent co-worker   | -.09400         | -1.495 | 199 | .136            | .011                      |
| Trust in contingent co-worker<br>Trust in permanent co-worker   | -.20300**       | -3.235 | 199 | .001            | .05                       |
| Antisocial work behaviours towards contingent co-worker<br>Antisocial work behaviours towards permanent co-worker | -.01750         | -.408  | 199 | .684            | 8.36                      |
| Person-focused ICB towards contingent co-worker<br>Person-focused ICB towards permanent co-worker                 | -.18750**       | -3.408 | 199 | .001            | .055                      |
| Task-focused ICB towards contingent co-worker<br>Task-focused ICB towards permanent co-worker                     | -.31833***      | -5.102 | 199 | .000            | .115                      |

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

#### 6.4.3.1.4 Summary

H14, H15 and H16 were all supported in the permanent employee sample (with one exception) and were all rejected in the contingent employee sample. These results indicate that a permanent employee perceives a permanent co-worker as more

trustworthy than a contingent co-worker. These results also indicate that a permanent employee trusts his/her permanent co-worker more than his/her contingent co-worker and provides this permanent co-worker with a higher level of person-focused and task-focused ICB's that that provided to the contingent co-worker. However, the results failed to indicate that a permanent employee is less antisocial to a permanent co-worker than to a contingent co-worker. On the other hand, these results also indicate that contingent employees do not significantly differentiate between a permanent co-worker and a contingent co-worker in terms of trust, perceived trustworthiness, antisocial work behaviours, person-focused ICB and task focused ICB.

However, as noted earlier, the absence of significant results in this sample (contingent employee sample) is probably due to its small size and the impact that has on reducing the power of the paired sample t-test which limited this test's ability to produce significant results from this sample. thus, based on this limitation, the conclusion that contingent employees do not differentiate between permanent and contingent co-workers is not definitive and cannot be generalised beyond this sample.

Finally, these results indicate that for employee trustors in general (results from the combined sample), an employee's levels of trust, perceived trustworthiness, person-focused ICB and task focused ICB towards a permanent co-worker were significantly higher than those towards a contingent co-worker.

## **6.5 Chapter Summary**

This chapter reported the findings of a quantitative inquiry concerned with empirically testing the conceptual model and hypotheses proposed by this thesis. Justification for the procedures used to analyse the data was first provided followed by a systematic reporting of the results of both preliminary analyses and primary analyses of the data set. The results of hypotheses testing are summarised in the following chapter which also provides a discussion of the findings in terms of their meaning and place within extant literature.

## **CHAPTER SEVEN**

### **Discussion of Quantitative Study Results**

#### **7.1 Introduction**

Using questionnaires and a cross-sectional design, data were collected from two types of employees to examine trust relationships between permanent and contingent employees in Jordanian organisations. While previous research (e.g. Knoll and Gill, 2011; Tan and Lim, 2009; Gill et al., 2005) has examined co-worker trust without defining the parties involved in the trusting relationship (in terms of employment status), the principle aim of this thesis was to examine trust using a more defined version of the co-worker relationship context.

Table 7.1 presents an overview of the initial support/non-support for each hypothesis based on bivariate correlations. As for Table 7.2, it presents an overview of the support/non-support for each hypothesis based on other statistical tests (e.g. regression, relative weights, and paired sample t-test).

Finally, it should be noted again that when reading through the discussion of findings relating to relational contexts where the contingent employee is the trustor, that is, findings produced using data from the contingent employee sample (n=46), it should be remembered that the generalisability and accuracy of these findings are possibly compromised by the small size of this sample which (as discussed in ch5) can reduce the statistical power of tests used to analyses data from contingent employees, which consequently can cause non-significant results within this sample.

#### **7.2 Antecedents of Trust in Contingent/Permanent Co-worker**

H1, H2, H3 were concerned with the relationship between each of the three trustworthiness components (ability, benevolence and integrity) and trust in permanent and contingent co-workers. H4 was concerned with the relationship between propensity to trust and trust in each of the two co-worker referents.

As reported in table 7.1 bivariate correlations provided initial support for the four hypothesized relationships in the majority of the work relationship contexts examined. However, the relationship between propensity to trust and trust was not initially supported in two of the six work relationship contexts; the contingent employee's relationship with a contingent co-worker and that with a permanent co-worker.

Table 7.1: Overview of initial support for hypotheses in the three samples (n=154, 46, 200)

| Hypotheses | Sample 1 <sup>a</sup> |                       | Sample 2 <sup>b</sup> |           | Sample 3 <sup>c</sup> |           |
|------------|-----------------------|-----------------------|-----------------------|-----------|-----------------------|-----------|
|            | <i>C</i> <sup>d</sup> | <i>P</i> <sup>e</sup> | <i>C</i>              | <i>P</i>  | <i>C</i>              | <i>P</i>  |
| H1         | Supported             | Supported             | Supported             | Supported | Supported             | Supported |
| H2         | Supported             | Supported             | Supported             | Supported | Supported             | Supported |
| H3         | Supported             | Supported             | Supported             | Supported | Supported             | Supported |
| H4         | Supported             | Supported             | Rejected              | Rejected  | Supported             | Supported |
| H5         | Supported             | Rejected              | Supported             | Supported | Supported             | Supported |
| H6         | Supported             | Supported             | Supported             | Supported | Supported             | Supported |
| H7         | Supported             | Supported             | Supported             | Rejected  | Supported             | Supported |
| H8         | NA <sup>f</sup>       | NA                    | NA                    | NA        | NA                    | NA        |
| H9         | Supported             | Supported             | Supported             | Supported | Supported             | Supported |
| H10        | Rejected              | Supported             | Rejected              | Supported | Rejected              | Supported |
| H11        | Supported             | Supported             | Supported             | Supported | Supported             | Supported |
| H12        | Supported             | Supported             | Supported             | Supported | Supported             | Supported |
| H13        | Supported             | Supported             | Supported             | Supported | Supported             | Supported |
| H14a       | NA                    |                       | NA                    |           | NA                    |           |
| H14b       | NA                    |                       | NA                    |           | NA                    |           |
| H14c       | NA                    |                       | NA                    |           | NA                    |           |
| H15        | NA                    |                       | NA                    |           | NA                    |           |
| H16        | NA                    |                       | NA                    |           | NA                    |           |

<sup>a</sup>Permanent employee sample (n=154). <sup>b</sup>Contingent employee sample (n=46). <sup>c</sup>Combined employee sample (n=200). <sup>d</sup>The contingent co-worker as referent. <sup>e</sup>The permanent co-worker as referent.

<sup>f</sup>Correlations not applicable.

Further support for these hypothesized relationships was sought through hierarchical regression analysis. Table 7.2 show the results of hypothesis testing in each of the three samples. Findings show that when the trustor is a permanent employee, trust in a permanent co-worker was positively and significantly predicted by all three trustworthiness factors (ability, benevolence and integrity).

Table 7.2: Results of hypotheses testing in the three samples (n=154, 46, 200)

| Hypotheses | Sample 1 <sup>a</sup> |                | Sample 2 <sup>b</sup> |           | Sample 3 <sup>c</sup> |           |
|------------|-----------------------|----------------|-----------------------|-----------|-----------------------|-----------|
|            | C <sup>d</sup>        | P <sup>e</sup> | C                     | P         | C                     | P         |
| H1         | Supported             | Supported      | Rejected              | Rejected  | Supported             | Supported |
| H2         | Supported             | Supported      | Rejected              | Rejected  | Supported             | Supported |
| H3         | Rejected              | Supported      | Rejected              | Rejected  | Rejected              | Rejected  |
| H4         | Rejected              | Rejected       | Rejected              | Rejected  | Rejected              | Rejected  |
| H5         | Supported             | Rejected       | Supported             | Supported | Supported             | Supported |
| H6         | Supported             | Supported      | Supported             | Supported | Supported             | Supported |
| H7         | Supported             | Supported      | Supported             | Rejected  | Supported             | Supported |
| H8         | Rejected              | Rejected       | Rejected              | Rejected  | Rejected              | Rejected  |
| H9         | Supported             | Supported      | Supported             | Supported | Supported             | Supported |
| H10        | Rejected              | Supported      | Rejected              | Rejected  | Rejected              | Supported |
| H11        | Supported             | Supported      | Supported             | Supported | Supported             | Supported |
| H12        | Supported             | Supported      | Supported             | Supported | Supported             | Supported |
| H13        | Supported             | Supported      | Supported             | Supported | Supported             | Supported |
| H14a       | Supported             |                | Rejected              |           | NA <sup>f</sup>       |           |
| H14b       | Supported             |                | Rejected              |           | NA                    |           |
| H14c       | Rejected              |                | Rejected              |           | NA                    |           |
| H15        | Supported             |                | Rejected              |           | NA                    |           |
| H16        | Supported             |                | Rejected              |           | NA                    |           |

<sup>a</sup>Permanent employee sample (n=154). <sup>b</sup>Contingent employee sample (n=46). <sup>c</sup>Combined employee sample (n=200). <sup>d</sup>The contingent co-worker as referent. <sup>e</sup>The permanent co-worker as referent.

<sup>f</sup>Hypothesis not applicable to context.

Yet, when the trustee is a contingent co-worker, only ability and benevolence were found to be significant predictors of trust. Thus, these results (for the most part) support the generalizability of the Mayer et al. (1995) model to co-worker contexts where permanent employees are trustors and permanent/contingent co-workers are trustees. In addition, these findings complement those in previous research (e.g. Knoll and Gill, 2011; Wasti et al., 2011) highlighting the three trustworthiness factors as critical predictors of trust in different referents and across different cultural contexts.

However, these findings also suggest that for permanent employees, the perceived integrity of the trustee is critical for the decision to trust a permanent co-worker, yet not for the decision to trust a contingent co-worker. One possible explanation for this finding is that contingent employees have a short-term and predefined relationship with the organisation (Kuvaas and Dysvik, 2009) and unlike regular employees, they do not experience long-term, repeated exchange relationships with the organisation, rather their interactions are bounded and short-term (Van Dyne and Ang, 1998). Hence, it is possible that their interactions with permanent employees are also short term and restricted to a few specific work situations within the organisation. Thus, permanent employees may not have sufficient time or opportunity to collect information on, and form an assessment of, the values or principles that a contingent co-worker holds. That is, within these circumstances, the acts demonstrating integrity would be rarer or more difficult to observe by these employees or harder to classify as acts demonstrating integrity. Accordingly, it is possible that a permanent employee's decision to trust a contingent co-worker is not based on integrity - "the trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable." (Mayer et al., 1995, p.720)- because of the difficulty of obtaining information about the integrity of this contingent co-worker relative to that of a permanent co-worker.

When the trustor is a contingent employee, findings from regression analysis show that the three trustworthiness factors failed to be significant predictors of trust in both referent co-workers (permanent and contingent). Thus, in the current study, antecedents proposed by the Mayer et al. (1995) model did not generalise to the context encompassing contingent employees as trustors and permanent/contingent co-workers as trustees. However, given that the correlations between trustworthiness factors and trust within this context were positive and significant and thus provide initial support for the first three hypotheses (Table 7.1), the results produced from the regression analysis

might be due in part to the small sample of contingent employees in the study (n=46) which may have affected the power of the statistical test and thus produced the non-significant results. Thus, the implication for this is that these results may inaccurately reflect the relationship between the three trustworthiness factors and trust within this sample of contingent employees, and the reality might be that the three trustworthiness factors are significantly associated with trust within the sample of contingent employees. Therefore, any conclusions drawn from the findings produced from this sample are not definitive and cannot be generalised beyond this sample.

In general when the trustor is an employee (without consideration of his/her employment status), correlations between the trustworthiness factors and trust in the respective referent were positive and significant yet findings from regression analyses show that only ability and benevolence were significant predictors of trust in both referent trustees. Again, these findings partially support the generalisation of the Mayer et al. (1995) model to these two specific forms of co-worker relationships. However, the finding pertaining to integrity was surprising since it was in contrast to empirical evidence (e.g. Knoll and Gill, 2011; Gill et al., 2005) linking integrity to trust in a co-worker.

This finding was also surprising since it challenges the predictions of Doney et al. (1998) who suggest that there are five different processes trustors may use to develop trust in a referent and that cultural factors either facilitate or inhibit the application of a particular process. As described in Chapter one, Jordan scored high on the cultural dimension 'uncertainty avoidance' (Alkailani et al., 2012). Kaasa and Vadi (2010) note that opposite to what prevails in cultures with high uncertainty avoidance, in cultures with low uncertainty avoidance organisational rules can be violated for practical reasons, conflicts are viewed as a natural part of life and ambiguous situations are viewed as interesting and natural. Consequently, Doney et al. (1998) argue that in high uncertainty avoidance cultures, there is a strong orientation to specify a range of acceptable behaviours or rules which make it easy for trustors to predict a trustee's behaviour. These arguments suggest that integrity which according to various researchers (e.g. Dietz and Den Hartog, 2006 ; Mayer et al., 1995) refers to a set of principles acceptable to the trustor, may be more valued by trustors in high uncertainty avoidance cultures since it provides a set of acceptable principles the trustor can use to predict the behaviour of the trustee and thus, reduce any ambiguity in the relationship.

Similar to the finding in the permanent employee sample, this finding raises the question of why integrity was not a significant predictor of trust within the combined employee sample, that is, the contexts where an employee in general is a trustor and permanent and contingent co-worker is the trustee. When the trustor is an employee in general (either permanent or contingent) and the trustee is a contingent co-worker, integrity was not a significant predictor of trust due possibly to both permanent and contingent employees not having sufficient time or opportunity to collect information on the values that a contingent co-worker holds. This explanation is expected to also apply to any co-worker relationship context involving a contingent employee as one or both of the parties involved in the relationship. When the trustor is an employee in general and the trustee is a permanent co-worker, the composition of the group of trustors (a mixture of permanent and contingent employees) in this relationship context may be the reason why integrity was not a significant predictor of trust in permanent co-worker. As was reported previously in this section, integrity was a significant predictor of trust when the trustor is a permanent employee and the trustee is a permanent co-worker, however, it was not a significant predictor when the trustor is a contingent employee and the trustee is a permanent co-worker. Adding the data collected from the permanent employee trustors with those from contingent employee trustors may have resulted in integrity not being a significant predictor of trust in a permanent co-worker.

Even though integrity was not a significant predictor of trust in these two co-worker contexts, the finding supports the claim that the relative salience of trustworthiness factors depends on the situation or relationship context (e.g. Tan and Lim, 2009) since there were differences between findings from the two co-worker contexts. Keeping in mind the limitation concerning the small size of the contingent employee sample and its effect on results from that sample, these differences highlight the importance of examining trust and its antecedents in different co-worker relationship contexts.

Finally, whereas initial support was provided in the form of positive and significant (yet weak) correlations between propensity to trust and trust in each referent in both the permanent and combined employee samples (Table 7.1), findings from regression analysis in the current study (Table 7.2) show that regardless of the employment status of the trustor, propensity to trust was not a significant predictor of trust in both referent trustees. These findings support similar findings reported by some researchers (e.g. Gill



et al., 2005), yet contradict findings by other researchers (e.g. Knoll and Gill, 2011) linking trust propensity to trust in different referents. One possible explanation for this finding is that in line with Gill et al.'s (2005) argument, propensity to trust will not be related to trust when information about the trustworthiness of the trustee is high or low. These same authors further propose that the only way for propensity to trust to have an impact on trust is when this information is ambiguous, that is the information does not help the trustor to clearly specify whether the referent is trustworthy or untrustworthy. In the current study, respondents were asked to choose two co-worker referents (one permanent and one contingent) with whom they have closely worked within their respective work units. Thus, given this close working relationship, it is expected that any trustor will have at least a minimum level of clear information about all or some of the trustworthiness facets of the trustee. Also, it is possible that each respondent chose those co-workers that they found to be most trustworthy when asked to choose two co-workers with whom they work closely. Consequently, the availability of information about the trustworthiness of the permanent and contingent co-workers (at high or low levels) may have undermined any influence of propensity to trust on trusting decisions.

In general, even though these four hypothesised relationships have previously been empirically tested in various work relationship contexts (e.g. supervisor, peer and subordinate), this is thought to be the first study to provide empirical evidence for these relationships in work relationship contexts involving permanent and contingent employees.

### **7.3 Relations between Trust Propensity and Trustworthiness Factors**

Three hypotheses were concerned with the relationship between the trustor's propensity to trust and the perceived ability (H5), benevolence (H6) and integrity (H7) of the respective trustee. As shown in tables 7.1 and 7.2, bivariate correlations were consistent with hierarchical regression analysis results in supporting or rejecting the hypothesized relationships, which were supported in almost all of the examined relationship contexts. Specifically, H5 was supported in all contexts except for that including the permanent employee as trustor and a permanent co-worker as trustee. H6 was supported in all relationship contexts. As for H7, it was supported in all contexts except for that including the contingent employee as trustor and the permanent co-worker as trustee.

This is possibly the first study to provide empirical evidence linking propensity to trust to trustworthiness components in co-worker relationship contexts where there is a history of interaction between the two co-workers. Notwithstanding the two exceptions, these findings provide empirical support for Dietz and Den Hartog's (2006) proposition that the trustor's pre-disposition to trust is one of the inputs or antecedents of trust the belief. The results also provide empirical support for the propositions of McKnight et al. (1998) that faith in humanity (a facet of disposition to trust reflecting a belief that nonspecific others are trustworthy) will lead to trusting beliefs (beliefs about the competence, benevolence, honesty and predictability of the trustee). Yet, these same authors restricted this proposition to initial work relationships with no interaction history. Even though the length of the relationship between the two co-workers was not controlled for in the current study, a minimum level of interaction history between the respondent and his/her co-workers can be assumed since respondents were asked to only chose co-workers with whom they worked with closely. Thus, these findings of the current study might suggest that the relationship between propensity to trust and trustworthiness factors can be extended beyond new work relationships to established work relationships.

Moreover, the fact that some of the hypothesized relationships did not apply to all co-worker relationship contexts suggests that the relationship between propensity to trust and trustworthiness factors depends on the relationship context, that is, who the trusting and trusted parties are. The findings raise the question as to why the propensity to trust of a permanent employee was related to the perceived ability of a contingent co-worker but not to the perceived ability of the permanent co-worker. The proposition made by McKnight et al. (1998) that to the extent the situation is novel and ambiguous, faith in humanity will lead to trusting beliefs might be one possible explanation. Given that contrary to permanent employees, contingent employees' interactions in the organisation are short term and bounded (Van Dyne and Ang, 1998), their perceived ability may be considered by permanent employees as more novel or ambiguous relative to the perceived ability of permanent co-workers. As a result, in the current study, the propensity to trust of a permanent employee was not related to the perceived ability of a permanent co-worker possibly because there is no (or relatively less) novelty or ambiguity pertaining to the abilities of this permanent co-worker.

This also explains why in the current study findings showed that the propensity to trust of a contingent employee was related to the perceived ability of a permanent co-worker and to that of a contingent co-worker. It is expected that for a contingent employee with restricted and short term interactions in the organisation, the abilities of both permanent and contingent co-workers will be relatively more novel and ambiguous than to a permanent employee, thus strengthening the relationship between propensity to trust of this contingent employee and the perceived ability of each respective co-worker.

These findings also raise the question as to why the propensity to trust of a contingent employee was related to the integrity of a contingent co-worker but not to the integrity of a permanent co-worker. One possible explanation for this finding might be based on predictions of social identity theory and social categorisation theory (Turner, 1991; Tajfel and Turner, 1979) discussed in chapter one. In this context, a contingent employee will favour and identify more with another contingent co-worker (in-group member) than with a permanent co-worker (an out-group member). Thus, the contingent employee might have a tendency to perceive a contingent co-worker as adhering to whatever values he/she considers acceptable (integrity by definition) more than a permanent co-worker adheres to these acceptable values. This finding suggests that the level of propensity to trust an individual has depends on the referent and on the group to which this referent belongs (in-group or out-group).

Another possible explanation is offered by McKnight et al. (1998, p.478) who propose that structural assurance belief, that is, “the belief that success is likely because such contextual conditions as promises, contracts, regulations, and guarantees are in place” will lead to the belief that the individuals involved in the situation are trustworthy. Ekmekci and Casey (2011) found that contingent employees who interact more frequently with other members of an organisation and receive more information about the organisation will demonstrate a higher degree of identification with this organisation. Since contingent employees have short-term and limited interactions in the organisation in contrast to permanent employees, it is possible that they identify less with the organisation than permanent employees do.

According to Turner (1991) one consequence of developing a social identity is depersonalization of individual self-perception, which is to perceive one’s self more in terms of the shared stereotypes that define his/her social category membership. This

implies that an individual who identifies with a group will change his/her behaviour to what he/she thinks is acceptable to the group. Based on these arguments, it is possible that permanent employees depersonalise or align their behaviours with the interests of the group they identify with (in this case the organisation) more than contingent employees do, which may also imply that permanent employees may adhere to organisational rules and procedures (as indicators of what acceptable behaviours to the organisation are) more than contingent employees do.

Thus, it is possible that the contingent employee's structural assurance belief that safeguards apply to situations involving the permanent co-worker more than the contingent co-worker, might have eliminated the need to use propensity to trust to form perceptions about the integrity of the permanent co-worker yet emphasized the need to use propensity to trust to form perceptions about the integrity of the contingent co-worker.

#### **7.4 The Relative Importance of Trustworthiness Factors**

H8 was concerned with the relative importance of trustworthiness factors in predicting trust in each respective referent, proposing that benevolence is more salient to the prediction of trust than the other two trustworthiness factors. As reported in table 7.2 and based on the results of the relative weights analysis, H8 was rejected in all six co-worker relationship contexts and the null hypothesis was accepted, suggesting that there were no significant differences in the relative importance of the three trustworthiness components to predicting trust in each respective co-worker. The current study is possibly the first to assess the relative importance of ability, benevolence and integrity in co-worker relationship contexts involving permanent and contingent employees as parties in the trusting relationship. These findings indicate that the three trustworthiness components were equally important for permanent, contingent and employees in general when deciding to trust each respective co-worker. These findings support those found in previous research (e.g. Knoll and Gill, 2011; Wasti et al., 2011) reporting that ability, benevolence and integrity are equally important to the prediction of trust in peer. In addition, findings relating to H8 suggest that the relative salience of the trustworthiness factors does not depend on the form of the co-worker trustor-trustee dyad. What these findings suggest was not consistent with what was

suggested in section 7.2 that integrity was not a significant predictor of trust in most of the examined co-worker contexts and as a result the relative importance of benevolence and ability to the prediction of trust was more than that of integrity. One possible reason for this inconsistency might be the sample sizes used in the relative weights analysis. A bigger sample size might possibly narrow down the confidence intervals and thus increase the possibility of detecting significant differences between ability, benevolence and integrity.

This explanation is reinforced by what was suggested by the other evidence in the form of the rank order of relative weights in addition to the rank order of squared semi partial correlations and beta coefficients. All this evidence was partially supportive of the rank order of the trustworthiness components proposed in H8. In each one of the three samples, the rank order of relative weights, squared semi partial correlations and beta coefficients all indicated that the perceived benevolence of the co-worker (permanent or contingent) was more important than the other two trustworthiness factors to predicting trust in the respective referent. This in turn is in line with the predictions of Doney et al. (1998) that in collectivist cultures, individuals develop trust using an intentionality process where the trustor bases his/her decision to trust on the benevolent intentions of the referent of trust.

To summarize, H8 was rejected in all three samples indicating that the three trustworthiness factors were equally important to the prediction of trust in the respective co-worker. However, given the rank order evidence, a bigger sample size might narrow down the confidence intervals which in turn might improve the chances of detecting significant differences between the three trustworthiness factors. Thus, future research should attempt to replicate these findings using a bigger sample size.

## **7.5 Relationship between Trust in Different Referent Types**

H9 was concerned with the relationship between trust in a permanent co-worker and trust in a contingent co-worker. As shown in table 7.1 and table 7.2, correlation results and hierarchical regression results were consistent with each other in providing support for this hypothesis. Findings indicate that for permanent employees (n=154), contingent employees (n=46) and employees in general (n=200), trust in a permanent co-worker

was positively and significantly related to trust in a contingent co-worker and vice-versa. These findings suggest that the relationship between the two constructs is stable across different co-worker relationship contexts and is not dependant on the form of the co-worker trustor-trustee dyad. The findings also highlight the importance of trust for organisations because they indicate that trust in one referent impacts trust in another referent within the organisation and vice-versa, thus, these dynamics contribute to the development of a climate of trust among permanent and contingent co-workers.

These findings are in line with those of previous research that found positive and significant links between trusting decisions in different referents. Knoll and Gill (2011) found that trust in supervisor was positively correlated with both trust in peer and trust in subordinate. Tan and Lim (2009) found that trust in co-workers was significantly related to trust in organisation. Further research is needed to replicate these findings and to empirically examine the conditions under which this relationship exists. For example; McKnight et al. (1998) proposed that an employee's structural assurance belief (that the situation is bounded by safeguards) will lead to trusting intention. Thus, according to these authors a work environment bounded by rules and regulations and other safeguards can contribute to establishing a climate of trust in the organisation where an employee is willing to be vulnerable to the actions of others because of his/her belief that others will not harm him/her since there are safeguards to prevent such incidents.

## **7.6 Trust in Co-worker and its Behavioural Outcomes**

### **7.6.1 Trust in Co-worker and Antisocial Work Behaviours**

H10 was concerned with the negative relationship between trust in a respective co-worker and antisocial work behaviours directed towards that co-worker. As reported in table 7.1 bivariate correlations provided initial support for the hypothesis, but only where the permanent co-worker is the trustee (regardless of who the trustor is). The regression analysis results (table 7.2) supported the hypothesis in both the permanent employee sample and the combined employee sample but again, only when the trustee is a permanent co-worker. These findings complement previous research (e.g. Abdul Rahim and Nasurdin, 2008; Thau et al., 2007; Colquitt et al., 2007) but also extend the

range of contexts in which trust in different referents has been linked to a range of antisocial, deviant or counterproductive work behaviours.

However, the hypothesis was rejected in the contingent employee sample and in the other two samples when the trustee is a contingent co-worker. This indicates that whenever one party (at least) in the co-worker relationship is a contingent employee, the relationship between trust and antisocial work behaviours does not apply. This raises two questions; first, why the hypothesised relationship did not apply when the trustor is a contingent employee (regardless of the employment status of the trusted co-worker), and secondly, why this relationship did not apply when the trustee is a contingent rather than a permanent co-worker.

Before continuing, it should be noted that the rejection of this hypothesis in the contingent employee sample might be due to the limitation of the small size of this sample noted earlier. The implication for this is that the non-significant results pertaining to this hypothesis (caused probably by the insufficient power of the test due to the small size of the sample) cannot be generalised beyond this sample and any conclusions drawn apply to this sample.

It was argued in chapter one that high levels of trust in social exchanges will reduce the risks and uncertainty inherent in these social exchanges and thus the trustor will refrain from exhibiting behaviours that show self-concern such as antisocial work behaviours. However contingent employees, unlike permanent employees, tend to experience short term and non-repetitive exchange relationships within the organisation (Van Dyne and Ang, 1998), with consequentially lower perception of risk and hence there would be less need in these contexts to use trust or antisocial behaviours to protect personal interests. That is, the relationship between trust and antisocial work behaviours does not apply to these co-worker contexts because the presence of one necessary condition (risk) for this relationship to exist will be perceived by employees as being short term and less frequent in these co-worker contexts. Moreover, as reported in chapter six, the mean and variance values for antisocial work behaviours exhibited by permanent and contingent employees towards a co-worker were relatively low. Specifically, permanent employees reported a mean score for antisocial work behaviours of 1.7630 (SD= .62034) towards permanent co-workers and 1.7208 (SD= .58388) towards contingent co-worker. As for contingent employees, they reported a mean score of 1.7464 (SD= .74845) towards

permanent co-workers and 1.8116 (SD= .85607) towards contingent co-workers. This might be one of the factors contributing to weakening (or in some co-worker contexts eliminating) any relationship between trust and antisocial work behaviours. The low variance in the outcome variable leaves little to be explained by the independent variable and as a result the relationship between trust and antisocial work behaviour will either be weak (e.g. co-worker contexts where permanent employees are the parties involved in the social exchange) or non-existent (e.g. co-worker contexts where the contingent employee is part of the social exchange).

Furthermore, as reported earlier, contingent employees showed lower levels of antisocial work behaviours towards their permanent co-workers than those showed by permanent employees towards their permanent co-workers. It is possible that compared to permanent employee, contingent employees are more likely to lose their jobs if they performed any antisocial work behaviours towards permanent employees.

Reaching a similar finding that workplace deviance and trust are not significantly related, Pane Haden et al. (2011) provided another explanation by speculating that the sensitive nature of the items in the scale measuring workplace deviance may have led participants to feel uncomfortable reporting their actual frequency of deviant behaviours and to respond in a socially desirable way. Even though in this thesis, the anonymity of these participants and their responses was assured, it is possible that the low levels of antisocial work behaviours reported by both permanent and contingent employees was due to these participants also feeling uncomfortable disclosing their actual frequency of these negative behaviours and were responding in a socially desirable way. If in fact they feel uncomfortable reporting their antisocial work behaviours, it is possible that the frequencies of their antisocial work behaviours are actually higher than those reported within these co-worker contexts. Therefore, in these situations, regardless of the reported levels of trust in co-worker (either high or low), participants reported low levels of antisocial work behaviours and this in turn, as explained earlier provided little if any to be explained by the independent variable.

In general, these findings indicate that the relationship between trust in a referent and antisocial work behaviours towards that referent may depend on the nature of the co-worker relationship, emphasising the importance of examining trust and its outcomes in different contexts.



### **7.6.2 Trust in Co-worker and Person-Focused / Task-Focused ICBs**

Two hypotheses proposed that trust in a respective co-worker has a positive relationship with person-focused ICBs (H11) and task-focused ICBs (H12) towards the respective co-worker. Tables 7.1 and 7.2 show that bivariate correlations and regression results provided support for both these hypotheses in all three of the samples examined. The findings indicate that trust in a co-worker has a positive and significant relationship with person-focused and task-focused ICBs towards the respective co-worker, regardless of the form of the co-worker trustor-trustee dyad. These findings are similar to previous research (e.g. Redman et al., 2011; Yang et al., 2009; Colquitt et al., 2007; Dirks and Ferrin's, 2002; McAllister, 1995) in linking trust in different referents to organisational and interpersonal citizenship behaviours, but they extend the range of work relationship contexts to which the relationship has been found to apply. Finally, the findings provide additional empirical support to Mayer et al.'s, (1995) proposition that, 'the willingness to be vulnerable', leads to risk taking behaviours (e.g. organisational citizenship behaviours) which are behavioural manifestations of the willingness to be vulnerable.

### **7.7 The Strength of Relations between Trust in Co-worker and its Positive Outcomes (Person-Focused and Task-Focused ICBs)**

H13 proposed that trust in a referent will be more strongly related to person-focused ICB than to task-focused ICB towards that referent. As indicated in tables 7.1 and 7.2, both correlation analysis results and regression analysis results provided support to this hypothesis in the six co-worker relationship contexts. These results indicate that regardless of the employment status of the trustor (permanent, contingent or an employee in general), trust in a respective co-worker was more strongly related to person-focused ICB towards that co-worker than to task-focused ICB towards that same co-worker. This suggests that the finding is not dependant on the trustor-trustee dyad of co-workers. Furthermore, the finding suggests that the strength of the relationship between trust and ICB depends on the form of ICB examined. The finding is similar to that reported by Settoon and Mossholder (2002) that trust in a co-worker was related to both person and task focused ICB, yet was more strongly associated with person-focused ICB than to task-focused ICB.

One possible explanation is that since the decision to trust is partly based on the perceived ability and competence of the trustee (Dietz and Den Hartog, 2006; Mayer et al., 1995), a high level of trust in the trustee might indicate that this trustee is perceived to have a high level of abilities. This could undermine the need to provide this trustee with any task-focused ICBs since there is a good chance that he/she is capable of performing his/her tasks with a minimum level of help from others. Zapata, Olsen and Martins (2013) also suggest that benevolence and integrity are likely more discretionary (within one's personal control) than ability is. In the current study, this argument would suggest that a high level of trust in a trustee might lead to a high level of person-focused ICB towards that trustee because variation in the level of benevolence exhibited towards the trustee is (relatively speaking) easily within the control of the trustor. On the other hand, because ability is less discretionary than benevolence, the trustor might want to provide task-focused ICBs to the trusted referent, yet is unable to do so because he/she does not possess the appropriate level of abilities or competence.

## **7.8 Differentiating between In-Group and Out-Group Co-workers**

H14 a, b and c were concerned with comparing the levels of person-focused ICB, task-focused ICB and antisocial work behaviours (respectively) directed towards an in-group and an out-group member, each proposing that the frequency of the behaviour towards the in-group member is higher than that towards the out-group member.

As shown in table 7.2, H14a and H14b were supported in the permanent employee sample but not in the contingent employees' sample. Echoing the predictions of social identity and self-categorization theories (Turner, 1991; Tajfel and Turner, 1979), the findings indicate that permanent employees provide their permanent co-workers (in-group members) with more person-focused and task-focused ICBs than they provide to their contingent co-workers (out-group members). This suggests that the level of ICBs directed at an employee depends on the groups to which the provider and the receiver of these behaviours belong. An additional possible explanation for this finding would be the notion that permanent employees may be less willing to help their contingent co-workers for fear of being replaced by them (von Hippel and Kalokerinos, 2012).

Yet, in the contingent employee sample, the predictions of social identity and self-categorization theories were not supported. The findings indicate that contingent employees did not differentiate between their permanent and contingent co-workers in terms of person-focused and task-focused ICBs. One possible explanation for this is that contingent employees interact less frequently with other members in the organisation than permanent employees do; a fact implied by Van Dyne and Ang (1998) when they note that contingent employees have short term and bounded interactions in the organisation. As a result they may identify less (Ekmekci and Casey, 2011) with other organisational members (both permanent and contingent co-workers).

An alternative explanation is that even though contingent employees might be expected (see chapter one) to identify more with other contingent co-workers this might be counterbalanced by the contingent employee's desire to be permanently employed by the organisation (to become a member of the other group). According to Pane Haden et al. (2011) many people accept temporary jobs hoping that the job will ultimately turn into a permanent one. At the least, contingent employees may want to improve their chances of returning on a contingent basis to the organisation when services that they can provide are needed. An example of this is reported by Marler, Woodard Barringer and Milkovich (2002) who found that contingent employees who prefer a permanent position with their employer displayed higher contextual, citizenship performance in comparison to contingent employees who prefer a temporary position with the employing organisation. Thus, these dynamics may cause contingent employees to not differentiate between in-group members (contingent co-workers) and out-group members (permanent co-workers) in terms of interpersonal citizenship behaviours.

Finally, for contingent employees, there might be less of a difference between ICBs towards contingent co-workers and towards permanent co-workers due to the short term nature of their contracts. Having short term contracts will not provide contingent employees with the time frame needed to work with one employment status group more than the other and as a result, the time they spend working with permanent co-workers will be comparable to that they spend working with contingent co-workers. On the other hand, it is expected that permanent employees generally spend more time working with their permanent co-workers than with their contingent co-workers because they have long term contracts with the organisation, which might also explain why they direct

ICBs to permanent co-workers on a more frequent basis than they do towards contingent co-workers.

Table 7.2 also shows that H14c was not supported in both the permanent and the contingent employee samples, indicating that these two types of employees (permanents and contingents) do not differentiate between their in-group co-workers and their out-groups co-workers in terms of antisocial work behaviours. The predictions of social identity and self-categorization theories did not apply to these co-worker contexts. It is speculated that these findings might be due to societal norms and particularly the organisation's own rules and regulations against any type of antisocial work behaviour towards any individual (regardless of their employment status).

H15 referred to comparing the levels of perceived trustworthiness of an in-group member with that of an out-group member, whereas H16 was concerned with comparing the levels of trust in an in-group member with that towards an out-group member. Both hypotheses propose a higher level of the respective construct directed towards the in-group member than towards the out-group member. Table 7.2 shows that both hypotheses were supported in the permanent employee sample, yet not in the contingent employee sample.

In relation to trustworthiness perceptions, these findings indicate that permanent employees perceive their in-group members (permanent co-workers) as more trustworthy than their out-group members (contingent co-workers). Similarly, pertaining to trust levels, the findings indicate that permanent employees trusted their permanent co-workers more than their contingent co-workers. Thus again, these findings echo the predictions of social identity and self-categorization theories. Furthermore, findings in relation to trustworthiness levels provide empirical support to McKnight et al.'s (1998) proposition that categorization processes that place the other person in a positive grouping will likely result in high levels of trusting beliefs in this person. Yet, McKnight et al. (1998) restricted this proposition to initial relationships. The findings of the current study suggest that this proposition applies to established relationships as well, or alternatively, that the impact of categorisation processes on the levels of perceived trustworthiness will endure from the 'initial relationship' phase through to the 'established relationship' phase.

However, in the contingent employee sample, findings indicate that contingent employees did not differentiate between permanent and contingent co-workers in terms of trustworthiness perceptions and levels of trust. One possible explanation for this finding is that (as discussed earlier in this section) due to their short term and less frequent interactions with both permanent and contingent co-workers, contingent employees do not identify strongly with either group. Thus they will not perceive a member of one employment status group as being more trustworthy than a member of another employment status group, and as a consequence will not significantly trust one member more or less than the other.

Where contingent employees do identify more with other contingent co-workers than with permanent co-workers, an alternative explanation might be that their possible inspiration to become permanent employees in the organisation motivates them to seek the approval or trust of their permanent co-workers. The concepts of felt obligation and reciprocity proposed by Blau (1964) in his social exchange theory might be one way through which contingent employees might attempt to gain the approval and trust of their permanent co-workers. Contingent employees might hold positive assessments of their permanent co-worker's trustworthiness and display high levels of trust towards them in the hope that they will develop a felt obligation and reciprocate such sentiments and attitudes towards the contingent employee. As a result, these possible attempts to identify with permanent co-workers might offset the consequences of identifying with contingent co-workers, and thus explain why contingent employees do not differentiate between permanent and contingent co-workers in terms of trust and trustworthiness perceptions.

Overall, the absence of significant differences in the means of the compared variables within the contingent employee sample indicated that contingent employees did not differentiate between their permanent and contingent co-workers in terms of trust, perceived trustworthiness, antisocial work behaviours and the two types of interpersonal citizenship behaviours. This absence of statistically significant differences within this sample might be due to its small size ( $n=46$ ). Pallant (2010) notes that power of a test is influenced by the sample size, and with small sample sizes (e.g.  $n=20$ ), non-significant results may be due to the test's insufficient power. This is one of the limitations of this thesis and will be discussed in a later section.

Thus, the implication for this is that these results may inaccurately reflect that contingent employees do not differentiate between their permanent and contingent co-workers in terms of trust and the other constructs while in reality contingent employees might in fact differentiate between their co-workers. Therefore, any conclusions drawn from the findings produced from this sample in addition to conclusions from comparing results from this sample with those from the permanent employee sample cannot be generalised beyond the contingent employee sample.

In summary, a comprehensive look at the findings presented in this section shows that contrary to contingent employees, permanent employees differentiated between their permanent and contingent co-workers in terms of trustworthiness perceptions, levels of trust and the two forms of ICBs (person-focused and task-focused ICBs). These findings all indicate that job status (permanent, contingent) has an impact on the perceptions, attitudes and behaviours towards co-worker referents within the organisation. These findings complement and provide support to empirical studies (e.g. Biggs and Swailes, 2006; Gilder, 2003; McDonald and Makin, 2000; Van Dyne and Ang, 1998) comparing between permanent and contingent employees in terms of a range of attitudes and behaviours towards a specific referent and reporting similar findings that indicate the presence of some differences between the two job status groups in terms of some of these attitudes and behaviours. For example, Gilder's (2003) findings also show that job status may influence the attitudes (affective commitment to the team and to the organisation) and behaviours (constructive and destructive behaviours towards the organisation) of permanent and contingent employees and thus these two job status groups may differ in these attitudes and behaviours.

However, these previous studies (e.g. Biggs and Swailes, 2006; Gilder, 2003; McDonald and Makin, 2000; Van Dyne and Ang, 1998) compared permanent and contingent employees in terms of the levels of these attitudes and behaviours towards the same referent (e.g. organisation). This current thesis, on the other hand, makes a different type of comparison than that present in the literature in that it compares between permanent and contingent employees in the sense of whether or not they differentiate between their permanent and contingent co-workers in terms of their perceptions, attitudes and behaviours towards these two co-workers.

In relation to antisocial work behaviours, both permanent and contingent employees were similar in not differentiating between their permanent and contingent counterparts in terms of this construct. This finding is in support to that reported by Pane Haden et al. (2011) who also found no significant differences between permanent and temporary employees in terms of workplace deviance.

When taken together, these findings indicate that there are both similarities and differences between permanent and contingent co-workers in terms of their perceptions, attitudes and behaviours towards different referents in the organisation.

Finally, findings from the combined employee sample showed that when the employment status of the trustor is not taken into consideration in the analysis, the levels of perceived trustworthiness, trust and ICB's that these trustors form and display towards their permanent co-workers were significantly higher than those towards their contingent co-workers. This finding is possibly due to the combined employee sample being mostly composed of permanent employees with a small proportion of contingent employees and by the possible explanations provided earlier for why permanent employees might differentiate between their in-group and out-group members and why contingent employees do not.

## **7.9 What is Uniquely Jordanian about the Findings**

A comparison between the findings discussed in this chapter and those reported for western contexts in previous research would indicate that in general, there does not seem to be any findings that are unique to the Jordanian or Arabic context. For example, in terms of the antecedents of trust, the relationships between trust and its antecedents proposed by the Mayer et al. (1995) model seem to be generally applicable to both western and Jordanian contexts. Similarly, as shown in an earlier discussion within this chapter, findings reported in this study in relation to the outcomes of trust are generally consistent with those reported in previous research from both western and eastern contexts. In relation to findings about whether employees differentiate between their permanent and contingent co-workers in terms of trust, trustworthiness assessments and behaviours towards these co-workers, there were no previous studies (to the extent of the researchers knowledge) that addressed this question. Thus, it is hard to know whether these findings are unique to the Jordanian context or not given that there are no reported findings from previous studies to compare them with. Thus, in general there

were no findings that were uniquely Jordanian or Arabic, since these findings generally confirmed findings from previous research.

However, there might be some specific aspects of these findings that might be uniquely Jordanian. One such finding is that relating to the relationship between integrity and trust. In previous research this relationship was confirmed in both western (e.g. Knoll and Gill, 2011; Gill et al., 2005) and eastern (e.g. Tan and Lim, 2009) contexts. Yet, in a Jordanian context and as discussed earlier, in almost all of the co-worker relational contexts examined in this study, integrity was not significantly related to co-worker trust.

Another finding that might be unique to both Jordanian and collectivist contexts in general is the relative importance of benevolence in predicting trust. Even though the relative weights analysis indicated that the three trustworthiness factors were equal in their relative importance to the prediction of trust, nonetheless, there was other evidence (i.e. rank order of relative weights, beta coefficients and squared semi partial correlations) providing partial support to the notion that benevolence is relatively more important than ability and integrity to the prediction of trust within a Jordanian context.

## **7.10 Summary**

This chapter provided a discussion of the quantitative study findings. The meaning of these findings in light of the extant literature was addressed and inconsistencies between these findings across the co-worker relationship contexts and between them and those reported in extant literature were explored and explained.

The next chapter presents the conclusions drawn from this thesis's findings. In addition, the limitations and future research suggestions for the quantitative study are listed. These are then followed by a discussion of the theoretical and practical implications of the thesis findings.



# **CHAPTER EIGHT**

## **Overall Discussion and Conclusion**

### **8.1 Introduction**

Chapter one highlighted the importance of trust in facilitating social and economic exchanges in addition to various positive outcomes at the individual and organisational levels. This justifies the attention trust has received from researchers over the past decades. Some of the many research themes that can be identified in the trust literature (Chapter one) have focused on understanding the nature of trust and identifying its antecedents and outcomes within several relational contexts in organisations and within a number of national contexts around the world.

In relation to the nature of trust, most of the extant conceptualisations describing the nature of trust have emerged from western countries where individualistic values are dominant. As a result, a number of researchers (e.g. Wasti et al., 2007; Noorderhaven, 1999) have raised the question of whether the concept of trust is universal across different cultures and countries. This thesis does not test whether or not trust is universal. Instead, this thesis attempts to answer the question of how do individuals in a collectivist culture view trust and is this view the same as that of individuals in individualistic cultures?. One of the aims of the thesis is to contribute to answering this question by exploring and identifying the common themes present in employees' conceptualisations of trust within one collectivist culture (Jordan) and comparing them with the common themes shared by many conceptualisations of trust in extant literature. Similarly, theoretical models identifying the antecedents and outcomes of trust originated from individualistic cultures, which led many researchers to test the applicability of such models to collectivist cultures in an attempt to provide an understanding of what causes trust within these collectivist cultures and what impact collectivist norms and values have on the relative importance of the antecedents of trust. In line with these efforts, this thesis contributes to such an understanding by providing further evidence of the applicability of the trust model proposed by Mayer et al. (1995)

to the examination of trust relationships in collectivist cultures through the examination of the antecedents of trust/distrust in co-workers within Jordanian organisations.

Pertaining to the second study reported in this thesis and as discussed in chapter one, another assumption that underlined the development of some of these theoretical models (e.g. Mayer et al., 1995) developed to identify and understand the causes and consequences of interpersonal trust within organisations was that the respective model would apply across various relational contexts within the organisation. As a result, numerous empirical studies have attempted to test the applicability of such models to different relational contexts within organisations in an attempt to provide insight and understanding of the causes and consequences of trust within each of these relational contexts and to detect any differences between these contexts also in terms of causes and consequences. This thesis extends such an understanding of the antecedents and outcomes of trust in different relational contexts by examining the causes and consequences of trust in new relational contexts - those representing the possible co-worker pairings that can be made using permanent and contingent employees - which have been overlooked in previous research on trust. This thesis also contributes to the literature by providing insight on the differences between these relational contexts in terms of the relative importance of the antecedents of trust. By doing so, this study is the first to empirically test a specific model for trust in a permanent/contingent co-worker that incorporates antecedents and positive/negative outcomes in addition to examining the relationship between trust decisions in these two referents.

Finally, numerous studies have attempted to understand the differences between permanent and contingent employees in terms of their attitudes and behaviours towards different referents within the organisation. In this thesis, the examination of a trust model within work relationship contexts that represent the possible co-worker pairings that can be made using permanent and contingent employees made it possible to provide insight and understanding on whether permanent and contingent employees differentiate between their permanent and contingent peers in terms of trustworthiness perceptions, trust decisions, antisocial work behaviours and person/task-focused interpersonal citizenship behaviours. A comparison of these two work status groups in terms of whether they differentiate between their two types of co-workers adds to the body of understanding pertaining to how permanent and contingent employees differ in terms of their perceptions, attitudes and behaviours within the employing organisation.

Following this presentation and summary of what this thesis is concerned with and its contributions to the current understanding displayed in literature on interpersonal trust within organisations, the next section in this chapter contains an overview of the main conclusions of the thesis, including those of the qualitative and quantitative studies. Given that the limitations and future research directions for the qualitative study were discussed in chapter four, the section that follows the conclusions will only focus on discussing the limitations and future research directions for the quantitative study. The final section in this chapter focuses on the theoretical as well as practical implications of both studies reported in the thesis.

## **8.2 Thesis Overall Conclusions**

### **8.2.1 Qualitative Study Conclusions**

The first study reported in this thesis was exploratory in nature and examined how the concept of trust is conceptualised by individuals in a collectivist culture (employees working in Jordanian organisations), what the determinants of trust and distrust in this situation are and compares the findings with extant literature on interpersonal trust within organisations.

Two major themes underlined the conceptualisations of interpersonal trust held by Jordanian employees, namely; the ‘willingness to be vulnerable’ to the trustee and ‘positive expectations’ about the trustee’s future conduct. These are essentially the same as those referred to by a number of authors (e.g. Colquitt et al., 2007; Rousseau et al., 1998) as the major themes present in many conceptualisations of interpersonal trust. Thus, these themes underlying the conceptualizations of trust as depicted in extant literature were transferable and applicable to the cultural context in which Jordanian organisations and Jordanian employees operate in. This Jordanian cultural context was characterised by previous research (Alkailani et al., 2012) as being collectivist rather than individualistic. In the current study, the meaning of interpersonal trust as depicted in extant literature, which is mostly derived from research within individualistic cultures, did not seem to be affected or changed by variations within the cultural dimension ‘individualism versus collectivism’ proposed by Hofstede (1983) as one of

the dimensions of national culture. That is, the characterisation of a cultural context as either individualistic or collectivist seems to have no impact on how interpersonal trust is defined and viewed by individuals in these cultures since the meaning of trust in extant literature was basically the same as that present within Jordan's collectivist culture.

For Jordanian employees, the decision to trust a co-worker within Jordanian organisations was based mostly on the three trustworthiness components; ability, benevolence and integrity leading to the conclusion that the proposed antecedents in the Mayer et al.'s (1995) integrative model of organisational trust were applicable to the co-worker relationship context within Jordanian organisations and the cultural context within which these organisations operate. Moreover, the Mayer et al.'s (1995) trust model appears to be also useful for examining the antecedents of not trusting a co-worker within organisations since the decision to not trust a co-worker within Jordanian organisations was mostly based on a number of antecedents which were for the most part the lack of the same factors that determine trust in a co-worker: lack of ability, lack of integrity, lack of benevolence.

Based on the findings of the qualitative study reported in this thesis, the Mayer et al.'s (1995) model appears to be a useful theoretical framework for examining and capturing the most prominent antecedents of trusting or not trusting a co-worker since the antecedents of trust proposed by this model were to a great extent more prominent for the decision to trust or not trust a co-worker than the other antecedents (e.g. predictability or lack of, identification with the trustee or lack of, the trustee being trusted or alternatively distrusted by others or reciprocity or lack of) identified in the qualitative study.

For Jordanian employees, the co-worker's perceived benevolence or lack of was the most salient antecedent for the decision to respectively trust or not trust a co-worker. Thus, the cultural dimensions, 'individualism versus collectivism' proposed by Hofstede (1983) do indeed have an impact on determining which antecedent is more prominent to the decision to trust or not trust a co-worker within Jordanian organisations. Employees working within Jordanian organisations and the collectivist culture these organisations operate in, might differ from individuals in individualistic cultures in terms of the relative importance they give to these trust and distrust

determinants since the theoretical arguments by Doney et al. (1998) suggest that individuals with an individualistic cultural background will place more importance on the perceived competence of the other party when deciding to trust them.

In general, the findings of the qualitative study add support to the view that the model of the basic nature of trust and its determinants may be generalizable across cultures and to the validity of using trust and trustworthiness measures within collectivist contexts.

### **8.2.2 Quantitative Study Conclusions**

The second study reported is a quantitative investigation of trusting relationships between co-workers defined by their employment status. This study focuses on three areas: first, the determinants and outcomes of trust within each of the relational contexts that represent the possible co-worker pairings among permanent and contingent employees and consequently, whether there are differences between these. Second, what is the relative importance of each trustworthiness factor for the prediction of trust within each context and does this finding differ from one relational context to another. Third, whether or not permanent and contingent employees differentiate between their permanent and contingent co-workers in terms of the levels of trust, trustworthiness and behavioural outcomes towards these co-workers including antisocial work behaviours and person/task-focused ICBs.

A number of conclusions were drawn based on the findings of this quantitative investigation. In terms of trust determinants within each co-worker context, findings depicted in table 8.1 support the conclusion that the Mayer et al. (1995) is broadly generalizable to the more specific co-worker contexts involving all possible pairings of permanent and contingent co-workers since this study found that trust within four of the six relational contexts was based on some or all of the three trustworthiness components. However, correlation results provided stronger support to this conclusion since it showed moderate to high correlations between the three trustworthiness factors and trust in permanent/contingent co-worker across all six relational contexts.

Based on the findings pertaining to the proposed outcomes of trust, the general conclusion in the current study is that trust between co-workers remains to be an important and beneficial phenomenon for organisations and its members. Trust in a permanent or contingent co-worker is strongly and positively associated with positive

outcomes at the individual level and thus, beneficial for the respective referent of trust. As depicted in table 8.1, trust within all relational contexts resulted in positive outcomes in the form of person-focused and task-focused ICB's directed towards the respective referent of trust.

However, trust in a permanent or contingent co-worker is not always a deterrent of antisocial work behaviours towards the respective co-workers since as shown in table 8.1 a reduced level of antisocial work behaviours was a consequence of co-worker trust in only two co-worker contexts; that involving two permanent employees and that involving an employee in general and a permanent co-worker.

Table 8.1: Antecedents and outcomes of trust within each co-worker relational context

| Variables                  | Co-worker relational contexts (trustor & trustee) |     |     |     |                   |     |
|----------------------------|---|-----|-----|-----|-------------------|-----|
|                            | P <sup>a</sup> &C <sup>b</sup>                    | P&P | C&C | C&P | E <sup>c</sup> &C | E&P |
| Antecedents of trust       |   |     |     |     |                   |     |
| Ability                    | √   | √   | X   | X   | √                 | √   |
| Benevolence                | √   | √   | X   | X   | √                 | √   |
| Integrity                  | X   | √   | X   | X   | X                 | X   |
| Propensity to trust        | X   | X   | X   | X   | X                 | X   |
| Outcomes of trust          |   |     |     |     |                   |     |
| Antisocial work behaviours | X   | √   | X   | X   | X                 | √   |
| Person-focused ICB         | √   | √   | √   | √   | √                 | √   |
| Task-focused ICB           | √   | √   | √   | √   | √                 | √   |

*Note.* A (√) sign denotes a significant relationship with trust in the respective co-worker. An (X) sign denotes a non-significant relationship with trust in the respective co-worker.

<sup>a</sup>Permanent employee. <sup>b</sup>Contingent employee. <sup>c</sup>Employee in general (both permanent and contingent employees).

These findings in relation to the antecedents and outcomes of trust provided insight into the determinants and outcomes of trust within each co-worker relational context and led to the conclusion that the form of the co-worker relational context has an impact on determining which antecedents and outcomes (of trust) will have a significant relationship with trust. This is because most of the relational contexts examined differed

to some extent in terms of the number of trustworthiness factors significantly predicting co-worker trust and the number of outcomes significantly related to trust. Thus some of the hypothesized relationships between trust and its antecedents or outcomes may not apply in certain co-worker relational contexts while still applying in others. However, it should be kept in mind that the findings in relation to the contingent employee as trustor may be a consequence of the small sample size of contingent employees, a limitation discussed later in this chapter.

Regardless of the employment status of the trustor and trustee, the three trustworthiness factors were equally important for the development of trust in the respective co-worker. Within the six relational contexts, the significance tests based on the bootstrapping procedure performed to compute confidence intervals led to the conclusion that neither the cultural context nor the form of the relational context had an impact on the relative importance of these factors. However, other evidence (e.g. Beta coefficients, squared semi partial correlations and the epsilon values from the relative weights analysis) were in line with the findings and conclusions of the qualitative study since these other relative importance indices also indicated (similar to the findings of the qualitative study) that the perceived benevolence of the respective co-worker was more important than the other two trustworthiness components to the prediction of trust in the permanent and the contingent co-worker.

The type of employment status (permanent or contingent) held by an employee and the circumstances that are associated with each employment status can either drive the employee to differentiate between an in-group and an out-group co-worker (e.g. permanent employees differentiated between their permanent and contingent co-workers in terms of the variables examined in this study) or alternatively drive the employee to not differentiate between the in-group and the out-group co-workers (e.g. contingent employees did not differentiate between their permanent and contingent co-workers in terms of the examined variables).

Finally, other findings in this study also led to a number of conclusions: first, in situations where an employee works closely with any two co-workers, this employee's level of trust in one of these co-workers is possibly a close indication or approximation of this employee's level of trust in the other co-worker since it was found that in all

three samples that trust in a permanent co-worker was positively related to trust in a contingent co-worker and vice-versa.

Second, regardless of the employment status of the trustor and trustee, the trustor's propensity to trust has a stronger impact on shaping the trustor's perceptions or beliefs (e.g. perceptions of the trustee's trustworthiness) than on shaping the trustor's decisions (e.g. the decision to trust) since in the current study, propensity to trust was positively related to the perceived ability, benevolence and integrity of the trustee in almost all relational contexts while failing to be significant predictor of trust within all of these contexts.

Lastly; the benefits of trust in a co-worker within Jordanian organisation manifest more strongly within the personal domains of co-worker relationships than within the professional domains of co-worker relationships. Furthermore, the strength of the relationship between trust in a respective co-worker and each type of ICB's is possibly influenced by the level of discretion the trustor has on his/her abilities, benevolent intentions and integrity since the study found that in all three samples examined, trust in a particular co-worker was more strongly related to person-focused ICBs than to task-focused ICBs towards that co-worker.

### **8.3 Quantitative Study Limitations and Recommendations for Future Research**

Since the limitations of the qualitative study in addition to its recommendations for future research has been discussed in chapter four, this section will focus only on the limitations and future research recommendations in relation to the quantitative study.

Similar to other studies, the interpretation of the results of this study must be made with caution due to a number of limitations which in turn need to be addressed in future research.

The first limitation of this study is its cross-sectional design, which prevents the inference of causality. Future research can use longitudinal designs to examine over time the antecedents and outcomes of trust in contingent and permanent co-workers, and thus make more accurate conclusions about causality between variables. Furthermore,



Lindell and Whitney (2001) note that cross-sectional studies are vulnerable to the effects of common method variance, which is discussed next.

An additional limitation of this study was the use of single-source data and self-reports to collect data on all of the variables of interest in this study. According to Williams, Hartman and Cavazotte, (2010) the use of self-reports is associated with common method variance.

Even though the results of Harman's one-factor test reported in chapter six indicated that common method variance was not much of a concern in this study, nonetheless future research could collect data using other- reports or multi-source data for some of the variables of interest (e.g. antisocial work behaviours, ICBs). Moreover, according to Podsakoff, MacKenzie, Lee and Podsakoff (2003) there are some limitations to Harman's single-factor test, for example, they note that the test is only a diagnostic technique and does nothing to control for common method effects. Craighead, Ketchen, Dunn and Hult (2011) note that although this test is used extensively, it is unable to detect moderate to small levels of common method variance, thus, it is recommended for use as a last resort. In addition, these same authors note that given its advantages (i.e. being straightforward, applicable to almost any research design and can be applied after data collection), the Harman's single-factor test should be the minimum standard when addressing common method variance, however, because it is increasingly being questioned, an alternative would be the use of the marker variable technique. The use of the marker variable technique was not possible in this thesis since the variables of interest in this study did not include a marker variable, which according to Lindell and Whitney (2001, p.115) is a variable "that is theoretically unrelated to at least one other scale in the questionnaire, so there is an a priori justification for predicting a zero correlation". That is, as (Williams et al., 2010, p. 477) explains, the marker variable is theoretically unrelated to substantive variables in the study and its correlation with these substantive variables is expected to be zero. Lindell and Whitney (2001, p.115) note that "this theoretically unrelated variable provides discriminant validity to the design". Thus, future research should use the marker variable technique to test for common method variance.

Podsakoff et al. (2003) note that method biases are a problem because they are a source of measurement error which threatens the validity of conclusions about the relationships

between variables. Lindell and Whitney (2001) explain that common method variance can possibly cause the inflation of observed correlations between variables. Similarly, Williams et al. (2010) note that common method variance might contaminate the empirical estimates of the relationships between variables.

Thus, to ensure that common method variance was not a serious problem in the data and to support the results of Harman's one-factor test, a common latent factor test was also conducted using Amos software. According to Podsakoff et al. (2003) in an unmeasured latent methods factor test, a latent factor is employed and added to the variables (measures) of the model and all items of these variables are allowed to load on this latent common factor. These authors also note that the researcher is not required to identify and measure this common latent factor.

To perform the test, all variables considered to be independent variables for a certain dependent variable were included in the model, (i.e. ability, benevolence, integrity, trust propensity and trust). As shown in table 8.2 following the standard recommended by Podsakoff et al. (2003) for the Harman's single-factor test, all values from this test were below 50%, indicating that the latent factor did not account for the majority of variance among the measures. These results provide support to the Harman's one-factor test and thus, common method variance was not a serious problem in the data.

Table 8.2: Results of common latent factor test in each of the three samples (n=154, 46, 200)

| Independent variables   | Common variance among all items in the model <sup>a</sup> |                       |                       |
|---|---|-----------------------|-----------------------|
|   | Sample 1 <sup>b</sup>                                     | Sample 2 <sup>c</sup> | Sample 3 <sup>d</sup> |
| Ability, benevolence, integrity of contingent co-worker, propensity to trust, trust in contingent co-worker | 36%   | 38.44%                | 39.69%                |
| Ability, benevolence, integrity of permanent co-worker, propensity to trust, trust in permanent co-worker   | 32.49%  | 47%                   | 38.4%                 |

<sup>a</sup>Value calculated by squaring the regression weight (factor loading) shown between the common latent factor and the items. <sup>b</sup>Permanent employee sample (n=154). <sup>b</sup>Contingent employee sample (n=46).

<sup>c</sup>Combined employee sample (n=200).

Another limitation relates to the relatively low alphas for some of the constructs (although they were within the range of commonly acceptable alpha values). Namely, the alpha scores for propensity to trust (i.e. .712, .691, .705 in the permanent, contingent and combined employee samples respectively), antisocial work behaviours towards a contingent co-worker (i.e. .783 in the permanent employee sample), antisocial work behaviours towards a permanent co-worker (i.e. .772 in the permanent employee sample) and finally trust climate (i.e. .796 in the contingent employee sample) were relatively lower than those reported for the other variables of interest in this study. However, according to the common standard, the alphas of these scales are considered acceptable, field (2009) notes that an acceptable value for Cronbach alpha is .7 to .8.

As was noted in chapter five (methods-quantitative study), the lower Cronbach alphas for these scales can be attributed as suggested by Tavakol and Dennick (2011) to either or all of the following: the number of items in the scale, the correlations among these items and/or the sample in which the scale was tested in. In this thesis, it is possible that the relatively low alpha scores for the four aforementioned scales are attributed to the small number of items for each of these scales; propensity to trust (6 items), antisocial behaviour towards permanent co-worker (6 items) and towards contingent co-worker (6 items) and trust climate (5 items). Furthermore, given that these aforementioned alpha scores were lower than those reported in previous research within other samples and for the same measures (i.e. .82 for propensity to trust in Knoll and Gill, 2011; .88 for antisocial work behaviour in Aquino and Douglas, 2003; and .88 for trust climate in Zeffane, 2009), it is possible that these lower scores are attributed to the Jordanian sample in which they were tested. Thus, indicating that there may be slight differences between the Jordanian sample and other samples in terms of how they view these constructs. This also applies to any other variable examined in this thesis where it's reported alpha score was higher or lower than that reported in previous research.

Notwithstanding this limitation and given that these alpha scores are within the commonly acceptable range, the data collected using these scales were included in the analyses. However, the recommendation noted in chapter five in relation the propensity to trust scale also applies to the aforementioned scales when used by researchers in a Jordanian context. It is recommended that these researchers inspect the phrasing of the items of each of these scales and when possible increase the number of these items to increase the alpha scores for these scales which consequently will help these researchers

reach more accurate conclusion from the observed relationships among and between these scales and other variables.

Another methodological limitation is related to the hierarchical nature of the data. as explained in chapter six (i.e. analysis of quantitative data), the data collected in the quantitative study was hierarchical since that data was collected from individual employees (level 1 variable) and data from these employees was nested within a number of organisations (level 2 variable) and thus, it was more suitable to use multilevel hierarchical linear modelling (MLM) techniques to analyse the data. However, it was also explained in chapter six that this could not be done because the conditions required to conduct this analysis were not sufficient (i.e. the number of organisations and number of participants within these organisations were both limited and insufficient to conduct the analysis) and as an alternative the study applied general linear model techniques to analyse the data. Thus, one of the limitations of this study is that it did not use more suitable statistical techniques (i.e. MLM) to account for the nested nature of the data. The implication of this limitation is that if there was any lack of independence between cases caused by the nested nature of data, it could not be dealt with due to not using multilevel linear modelling techniques. According to Field (2009, p.739) “if a lack of independence is being caused by a level 2 or level 3 variable then a multilevel model should make this problem go away (although not always)”. Thus, in this study, if a lack of independence between cases was caused by a level 2 variable (i.e. employees being nested in organisations and each organisation influencing the scores of its employees on trust), this could not be accounted for, and the assumption of independence of observations would be violated. According to Field (2009) if assumptions are being violated, the findings cannot be generalised. Thus, these statements indicate that the nested nature of the data may pose a threat to the independence of observations and thus, limit the generalisability of the findings of this study beyond its sample.

However, as argued in chapter six, the independence of observations assumption was not violated for the statistical tests in the sense that each value of the outcome variable or observation (i.e. trust score) came from a separate and different participant and these observations have no effect on one another due to participants not knowing the co-worker rated by other participants. Furthermore, the results of the ANOVA test (Appendix 4.7) show that for most of the study variables, there were no statistically significant differences in the means of each variable across the different organisations.

For the few variables where these significant differences exist, the differences were relatively small. Thus, indicating that there is no reason to think that the means of these variables will largely differ between the different organisations from which the samples of this study were drawn.

Furthermore, several theoretical arguments suggest that the level of trust is influenced mainly by the interaction between the relationship dyad more so than by the organisation in which the relationship exist (e.g. Dietz, 2011). For example, Dietz (2011) notes that trust is based on a positive assessment of the other party's trustworthiness (a sequence he states represents a universal dynamic common to all trust encounters) while also noting that the trust building impact of institutions is greatly overstated by arguing that institutional influences can be reassuring and enabling of trust, however they are not sufficient to enable trust decisions. There are some theoretical arguments supporting the influence of institution on trust development. For example, McKnight et al. (1998) argued that institution-based trust which consists of situational normality dimension (i.e. the belief that the situation is normal) and the structural assurances dimension (i.e. the belief that contextual conditions such as regulations are in place within the organisation) can affect initial trust formation between organisational members. However, it can be argued that in most cases, (and especially in the case of the Jordanian organisations sampled in this study), these two factors suggested by McKnight et al. (1998) are not expected to differ significantly among organisations and thus, are not expected to lead to significant differences in trust levels among members within these organisations. Alternatively, Dietz (2011) further argues that the institution's constraints and incentives (proposed to impact trust building) can be ignored by organisational members, circumvented, or resented as impositions.

Thus, based on the ANOVA test results and the theoretical arguments suggesting that organisational influences on dyadic trust development are relatively minimal and equal across organisations, it is concluded that the nestedness of the data does not pose a serious or major threat to the independence of observations and thus, does not represent a serious threat to the generalisability of this study's findings.

However, future research replicating this study, should attempt to collect data from a sufficient number of organisations and increase the number of participants within each organisation to allow for analyses using MLM techniques.

Another limitation of this study pertains to the generalizability of the findings, which is compromised by a number of factors, including: contextual limitations such as the number of organisations and industries covered in addition to the culture context within which the study was conducted, sample size, and the limited range of contingent employee's participants included in this study.

In relation to contextual limitations, the examination of the antecedents and outcomes of trust in permanent and in contingent employees was carried out using participants from organisations that operate in Jordan where collectivist norms and values are prevalent. The organisations from which participants were recruited covered five different industries. Thus, even though there is a need for future research to replicate the findings of this study in similar cultures and across similar industries to assess the robustness of these study findings. Nonetheless, future research should also be conducted within other cultures (e.g. individualistic) and other industries to particularly examine the antecedents and outcomes of trust in permanent and contingent co-workers which was not done before in individualistic cultures and to assess the generalizability of the findings of the current quantitative study and whether they will hold in these other contexts.

As noted in chapter five and reiterated in chapters six and seven, one of the limitations of this study is the small sample size of the contingent employee sample ( $n=46$ ). As argued in chapter five, the implication of the small size of this sample is that the statistical power of tests used for hypotheses testing (using data from this sample) will be reduced to level that does not allow for the production of statistically significant results. Tabachnick and Fidell (2013, p.11) note that power "represents the probability that effects that actually exist have a chance of producing statistical significance" and suggest that the sample size should be large enough to show a significant relationship between two variables. This indicates that due to the tests having insufficient power, the test of hypotheses using data from this sample may not give an accurate image or assessment of the hypothesized relationships between variables within this sample and consequently within the larger population of contingent employees.

For example, the size of the contingent employee sample ( $n=46$ ) was unfortunately below that recommended for generalising from regression analyses. Consequently, the results from four regression models (detailed in chapter six, section 6.3.3) cannot be generalized. Moreover, the small size of the contingent employee sample influenced also the power of the paired sample t-test when using data from this sample. As explained earlier, the insufficient power of this test might have led to non-significant results in the contingent employee sample indicating that contingent employees did not differentiate between their in-group and out group members in terms of the variables of interest. Thus, the paired sample t-test results derived from the contingent employee sample cannot be generalised to the contingent employee population and may not reflect. Moreover, based on the arguments above, the results may not accurately depict the reality of the hypothesised relationships within this sample due to its small size. Another implication of this limitation is that it limited the generalisability of findings produced using data from this sample.

Researchers seeking to replicate or extend the findings of this study should aim for larger sample sizes of contingent employees, though they may need to be wary of the same factors that made it difficult for the current study. Namely; most of the organisations contacted by the researcher had only a handful of contingent employees who were typically concentrated in only one department (this situation does not apply to contacted organisations working in the education sector). This necessitated collecting data from a larger number of organisations which in turn required increased access to organisations, time and resources. Furthermore, the limited time most of these contingent workers spent in the employing organisation made it difficult to contact them to distribute questionnaires and more importantly to retrieve completed questionnaires. Future research can benefit from the use of online surveys to reach out to contingent employees and to more easily retrieve questionnaires from them.

Though several types of contingent employees participated in the study, they did not represent the whole range of contingent work arrangements. Future research could attempt to include some of these other arrangements.

In this thesis, one of the research questions was interested in examining whether or not an employee would differentiate (in terms of trust and other perceptual and behavioural variables) between two co-workers with different employment statuses. The employee

and the co-worker being different or similar in terms of employment status was proposed to explain any variance between the levels of trust this employee places in two of his/her co-workers. The choice of employment status was brought about because the main interest and focus of this thesis (as noted in chapter one) was on examining trust within relational contexts where the parties involved were defined by employment status rather than organisational position, which as noted in chapter one was an area not covered in previous research.

However, other status variables (i.e. experience, educational level, age, tenure, the length of the relationship with the co-worker) that can be used as categorisation variables might also explain why an employee differentiates between two co-workers in terms of trust or other variables. For example, two co-workers with similar working experience or similar educational levels might have a more trusting relationship than that between two co-workers with different working experiences or different educational levels.

Given that this thesis provided empirical evidence establishing that differences and similarities in employment status has some influence on the levels of trust an employee places in two-co-workers even in a relatively hierarchical organisational culture such as that in Jordan, the door is open now for other researchers to compare this impact with that of other explanatory status variables and this can provide evidence of which of these variables can be ruled out as an explanatory variable. Furthermore, the model tested in this thesis within the context of co-worker relationships among permanent and contingent colleagues was rather a general model that has the capacity to apply to a number of different relational contexts within the organisation. However, future research that examines the influence of the other status variables (noted earlier) can help introduce context-specific trust models that are more specific to the relational contexts among permanent and contingent employees and that include trust antecedents that apply only to these relational contexts. Schoorman et al. (2007) suggested the need to develop context-specific models of trust that specifies variables that are unique to the examination of trust within a certain context.

Another limitation is that concerned with the possibility that the permanent/contingent bifurcation might not be a major managerial issue in Jordan. Even though it was argued in chapter one that permanent and contingent employees do co-exist within Jordanian



organisations and because of that the potential disadvantages (suggested in the literature) of using a blended workforce are a possible occurrence within Jordanian organisations and thus could create an issue for managers to deal with, nonetheless, the permanent/contingent bifurcation is probably a more prominent issue for organisations in western countries where the trend of using contingent workers is more widespread. Thus, future research that examines trust within co-worker relationships among permanent and contingent colleagues should also be carried out in countries where the trend of using a contingent worker force and a blended workforce is more widespread.

Furthermore, as discussed in chapter one, the quantitative study takes place in Jordan, where hierarchical structures are more dominant than lateralisation within organisations. Thus, one of the limitations of this study is that it is confined within the boundaries of hierarchically organised firms. Given that it is hard to know whether or not the findings of this study will be similar or different in (or would generalise to) more laterally organised firms without empirical evidence from the literature, it is recommended that future research duplicate this study in organisations that are more laterally organised or carry out comparative studies including samples from both hierarchically and laterally organised firms.

Finally, the scope of what this study covers of the subject of trust in permanent and contingent employees is necessarily also limited. The proposed antecedents and outcomes of trust in the two employee referents covered a limited number of trust determinants and behavioural outcomes and were only at the individual level. Other areas within this subject are open to investigation.

Further research could test the robustness of the finding that permanent employees differentiated between permanent and contingent co-workers while contingent employees did not. Future studies could add to the range of trust antecedents and outcomes. For example, in the qualitative study reported in this thesis, predictability emerged as a moderately strong antecedent for trust in a co-worker. The impact of contextual factors (e.g. HRM policies and practices) on trust in permanent and contingent co-workers is another possibility. In chapter one, it was noted that not including affective evaluations as an antecedent of trust in this study was a limitation, thus future research can examine the impact of these affective evaluation in addition to the other trustworthiness factors on trust. In terms of outcomes, other outcomes at

individual, group and organisational level (e.g. performance, OCB) can be examined. The antecedents and outcomes of trust in permanent and contingent employees could be investigated from the point of view of the supervisor or direct manager. For example, the relative importance of trustworthiness factors for the supervisor's trust in each employee referent can be assessed in addition to assessing whether supervisors differentiate between the two employment status groups in terms of trust, trustworthiness, interpersonal citizenship behaviours and other outcomes (e.g. permanent and/or contingent employee individual performance).

## **8.4 Research Implications**

Notwithstanding the limitations of the quantitative study (as discussed in section 9.3), the contributions made to the current understanding of the research areas investigated in this thesis are of interest for both academics and practitioners.

### **8.4.1 Implications for Theory**

As discussed in the introduction section of this chapter, this study extends and adds to the current understanding of trust and trust between permanent and contingent employees.

One main implication of this thesis is that many existing theoretical arguments and propositions regarding trust and the predictions of social identity and social categorization theories can be extended to co-worker contexts involving permanent and contingent employees and to the Jordanian cultural context. Specifically; findings relating to the nature of trust in the qualitative study and to the antecedents of trust in both the qualitative and quantitative studies were for the most part supportive of the generalizability of the Mayer et al.'s (1995) model to the Jordanian national context and across the examined co-worker relational contexts. Findings also advanced the understanding of the important role of trust in facilitating positive outcomes within the organisation. Findings also provided empirical evidence on theorised relationships that had not been examined in previous research (e.g. the relationship between propensity to trust and trustworthiness components).

This thesis also provides novel findings on trust between permanent and contingent employee co-workers. Previous research has mainly focused on establishing links among trusting decisions in the other referents (e.g. supervisor, subordinate, peers and organisation). One finding was that trust in a permanent employee was positively and significantly related to trust in a contingent employee and vice-versa. Other original findings of the thesis are that permanent employees differentiated between their permanent and contingent co-workers, in favouring their permanent co-workers in terms of trust, trustworthiness perceptions, person-focused and task-focused ICBs while contingent employees did not. Yet both employment status groups were similar in not differentiating between their permanent and contingent co-workers in terms of antisocial work behaviours towards co-workers. These findings contribute to the body of literature attempting to understand the differences between permanent and contingent employees' attitudes and behaviours.

There were also novel findings pertaining to the applicability of the hypothesized relationship across the different co-worker relational contexts examined in this thesis. Some hypothesized relationships applied to all of the examined relational contexts (e.g. relationships between trust and ICBs, relationships between trusting decisions in different referents, trust being more strongly related to person-focused than to task-focused ICBs and the relative importance of trustworthiness factors). Other findings showed that the existence of a significant relationship between trust and its antecedents and/or outcomes depended on the co-worker relational context examined and was not uniform across these relational contexts. By comparison, not differentiating between the two types of co-workers in terms of antisocial work behaviours was uniform across all the examined relational contexts. Other than being novel, these findings highlight for researchers the importance of considering the employment status of the trustor and trustee when examining the antecedents and outcomes of trust between co-workers.

#### **8.4.2 Implications for Practice**

Chapter one highlighted and discussed the important role trust plays in facilitating positive outcomes at the individual and organisational levels. Thus it is not surprising to see the topic of interpersonal trust within organisations receive a great deal of attention and consideration from both academics and practitioners and it is also not surprising to

see this translated into attempts and initiatives by practitioners to facilitate and promote trust within their respective organisations and among different organisational members.

According to Tan and Lim (2009) in an age of immense competition, organisational resources are limited and precious and any opportunity for organisations to improve the effectiveness of its members and reduce any impediments in the organisation is highly valued. The findings of this thesis provide several HR implications for organisations and managers that can help organisations improve their and their members' effectiveness and efficiency. In this section, the implications of the qualitative study findings will be discussed first, followed by a discussion of the implications of the quantitative study findings.

#### **8.4.2.1 Practical Implications of the Qualitative Study Findings**

The findings of the qualitative study emphasized the importance of the three trustworthiness factors (or perceived lack of these factors) for the development of trust or distrust in a co-worker and the greater importance of benevolence or the lack thereof (relative to the other two trustworthiness factors) for respectively developing trust and distrust in a co-worker. Thus, within Jordanian organisations, in order to increase the levels of co-worker trust and decrease levels of co-worker distrust, these organisations should focus their efforts and resources on improving the perceived abilities, benevolence and integrity of its employees more than on facilitating co-worker trust through the other identified antecedents in the qualitative study. Furthermore, improving the perceived benevolence of employees must have more priority than improving the perceived ability and integrity of these employees. To avoid repetition, the recommended HR strategies on how to improve the perceived ability, benevolence and integrity of employees will be discussed in more detail next when discussing the implications of the findings of the quantitative study pertaining to the antecedents of trust in permanent and contingent co-workers.

#### **8.4.2.2 Practical Implications of the Quantitative Study Findings**

In this section, the practical implications for the findings of the quantitative study will be discussed starting with the implications of the findings pertaining to the antecedents and outcomes of trust in permanent and contingent co-workers. This is followed by the implications of other findings that this study reported. Finally, the issue of whether

permanent and contingent employees differentiate between their permanent and contingent co-workers will be discussed.

#### **8.4.2.2.1 Antecedents and Outcomes of Trust in Contingent/Permanent Co-worker**

In relation to the quantitative study, several findings reported in this study emphasised the important role co-worker trust plays in producing positive outcomes for the organisation and its members. Such findings are those pertaining to; the significant relationships found in all of the examined relational contexts between trust in a co-worker and the two forms of ICBs towards the respective co-worker, the significant negative relationship found between trust in a permanent co-worker and each of the permanent employee's and the general employee's antisocial work behaviours towards the permanent co-worker, and finally the significant positive relationship between the trustor's trust in a permanent co-worker and his/her trust in a contingent co-worker which applies regardless of the employment status of the trustor (e.g. permanent employee, contingent employee, or a general employee). These suggest that organisations should invest in and implement HR strategies that aim to improve the levels of trust among all types of co-workers within the organisation.

Findings of the examination of the antecedents and outcomes of trust within each of the relational contexts can provide managers with insight regarding which trust antecedents are significant for the development of trust within each co-worker context and which outcomes needs their attention.

Previous research has pointed to a number of HR implications in terms of improving the perceived trustworthiness of co-workers within an organisation. Specifically; to improve perceptions of a co-worker's abilities and competencies, Knoll and Gill (2011) recommend that, organisations must pay attention to recruiting, selecting, training and retaining those individuals with the required level of knowledge, skills and abilities needed to perform a job. Furthermore, these same authors recommend the use of employee development and succession planning strategies to make sure that job positions are filled with those who are most qualified. To improve the perceived benevolence and integrity of co-workers Tan and Lim (2009, p.62) suggest that "organizations can promote, through visions and campaigns, the need to be benevolent to fellow co-workers and to exhibit high levels of integrity."

In general, a comprehensive overview of findings reported in previous research (e.g. Knoll and Gill, 2011; Wasti et al., 2011; Tan and Lim, 2009; Gill et al., 2005) provide strong indication that all three trustworthiness factors are prominent for the development of trust within a number of different relational contexts. Thus, it is both practically and theoretically sound to recommend that HR managers or managers in general focus on and attend to all three trustworthiness factors when attempting to enhance trust within each of the six co-worker relational contexts examined in this thesis. However, it is also recommended (based on the findings reported in this thesis) that while HR managers must manage all three aspects of trustworthiness across the different co-worker contexts within a blended workforce, they can also place different degrees of emphasis to different aspects of trustworthiness. That is, managers can direct more of their efforts and available resources towards the aspects of trustworthiness that appear to be most prominent for trust within a certain relational context while directing relatively less of those efforts and available resources towards the aspects of trustworthiness that appear to be least prominent for the development of trust in this relational context. This recommendation is important because it can help organisations become more efficient and effective in light of their limited resources.

For permanent employees (n=154), the findings of this study emphasized the importance of all three trustworthiness factors in the development of trust in another permanent co-worker; while trust in a contingent co-worker was only based on perceptions of their ability and benevolence. Thus, to increase levels of trust between any two permanent employees, the organisation must work on improving the perceived abilities, benevolence and integrity of its permanent employee workforce based on the HR strategies noted earlier. To improve the perceived benevolence and integrity of these permanent employees, the organisation must communicate a vision that emphasizes the need to be benevolent to co-workers and to exhibit a high level of integrity to both the existing pool of permanent employees and to those who are newly hired in permanent positions in the organisation. To improve the perceived abilities of the permanent co-worker the organisation is advised to recruit, select, train, develop and retain those permanent employees who demonstrate that they possess what is required to perform the job in terms of knowledge, skills and abilities.

When attempting to increase a permanent employee's level of trust in a contingent co-worker, managers should use the same strategies used in the co-worker context

involving two permanent co-workers. Yet, to help their organisations become more efficient, they should direct more efforts and available resources to improving the perceived ability and benevolence of contingent employees than to improving the perceived integrity of these contingent co-employees.

For contingent employees (n=46), even though the findings of this study showed that the three trustworthiness factors were not significant predictors of trust in a permanent or contingent co-worker, nonetheless it would be both impractical and theoretically unsound to recommend that trustworthiness factors not be considered when managing trust in relational contexts involving a contingent employee as the trustor. This is because as noted earlier, previous research has indicated the importance of these trustworthiness factors for trust development across different contexts. In addition, the non-significant results produced from this sample were probably due to statistical power issues caused by the relatively small size of this sample.

In relation to the combined employee sample, even though the findings derived from this sample suggest that managers should focus more on improving the perceived ability and benevolence of permanent and contingent trustees than on improving the perceived integrity of these trustees, nonetheless, managers are advised to focus on improving the perception of all three trustworthiness factors. This is because it is more likely that the majority of the workforce within many organisations consists of permanent employees, and to ensure that these employees trust their permanent counterparts, the findings of this study suggest that managers pay attention to all three trustworthiness factors.

Concerning the outcomes of trust, as shown in table 8.1, trust does not play a major role in inhibiting antisocial work behaviours within the examined co-worker relational contexts; organisations must control levels of antisocial work behaviours through means other than trust.

#### **8.4.2.2.2 Other Findings**

In relation to findings linking trust propensity to trustworthiness factors, another way of improving the chances of permanent and contingent co-workers being perceived as having high levels of abilities, benevolence and integrity would be for the organisations to at least ensure that its pool of employees (both permanent and contingent) do not have low levels of propensity to trust. For the existing pool of employees (both

permanent and contingent) in an organisation, the organisation can communicate and promote to them the individual and organisational benefits that result when employees trust other members in the organisation. Managers and supervisors can communicate this information to their respective subordinates via written and oral media and employee training programs can include materials that communicate this information.

For potential permanent and contingent employees, assessing the level of the applicant's propensity to trust can be part of the selection process, possibly by including in the application form a small measurement scale.

Another finding of this study with managerial implications relates to the relationship between trusting decisions in permanent and contingent co-workers. This finding emphasizes the importance of facilitating employees' trust in both types of co-worker referents and suggests an additional way to improve or reinforce the level of trust in either referent. Thus, managers need to pay equal attention to promoting trust in both permanent and contingent co-workers.

Based on the findings pertaining to the strength of the relationship between trust and each type of ICB's and the interpretation given for these findings, improving employees ability to provide task-focused ICBs would need more attention from managers than improving their ability to provide person-focused ICBs. The recruitment and selection of highly qualified individuals to fill permanent and contingent vacancies in addition to providing training and development programs for the existing pool of permanent and contingent employees may help ensure that these employees acquire sufficient levels of knowledge, skills and abilities to qualify them to provide higher levels of task-focused ICBs to the co-workers that they trust.

#### **8.4.2.2.3 Differentiating between Permanent and Contingent Employees**

As previously noted in chapter one, a study by Pane Haden et al. (2011) pointed to the notion that an understanding of the attitudes and behaviours of the types of workers in the organisation will help leaders manage their workforce more effectively. The findings of this study pertaining to whether permanent and contingent employees differentiate between their in-group and out-group members in terms of trust, trustworthiness, ICBs and antisocial work behaviours can provide a guide to help organisations and managers effectively manage the different possible co-worker



relational contexts involving permanent and contingent employees. That is, these findings can help them decide which forms of co-worker relational contexts are problematic relative to other co-worker contexts and thus need the organisation's attention in terms of managing the levels of trust, trustworthiness, interpersonal citizenship behaviours and antisocial work behaviours within the respective relational contexts.

Given that contingent employees did not differentiate between their co-workers based on employment status, organisations and managers should not focus on one relational context more than the other. Yet, because permanent employees favoured their permanent co-workers over their contingent co-workers in terms of perceived trustworthiness, trust and the two forms of ICBs, organisations and managers need to focus their attention and resources more on the co-worker relational context involving permanent employees as trustors and contingent co-workers as trustees than on the relational context involving two permanent employee co-workers. As noted in chapter one, trust enables co-operation (Tyler, 2003). Therefore, having relatively lower levels of trust between permanent and contingent co-workers than those between permanent employee co-workers indicate that cooperation between permanent and contingent co-workers might be relatively lower than that between permanent co-workers. According to von Hippel and Kalokerinos, (2012, p.211) "if the presence of temporary employees introduces problems with their permanent co-workers, the friction between permanent and temporary workers may offset the benefits that organizations hope to gain through the use of temporary employees.". Thus, managers must attempt to improve the levels of trust in contingent co-workers, their perceived trustworthiness and the ICBs towards these co-workers. Improving the trustworthiness perceptions of these contingent co-workers using the strategies noted earlier can start a chain reaction where levels of trust in these co-workers are improved and consequently higher levels of person-focused and task-focused ICBs are directed towards these co-workers.

Moreover, if the relatively lower levels of trustworthiness perceptions, trust and ICBs by permanent employees towards contingent co-workers were the result of viewing these contingent co-workers as a threat, managers can attempt to minimise the perceived threat. von Hippel and Kalokerinos (2012) recommend, - based on their research findings, - using temporary employees who (as opposed to having no choice)

voluntarily choose to be temporary employees and making sure that permanent employees are aware of the voluntary status of these employees.

Finally, both employment status groups were similar in not differentiating between their permanent and contingent co-workers in terms of antisocial work behaviours. Thus, organisations and managers are advised to focus equally on controlling the antisocial work behaviours of both permanent and contingent employees towards their respective permanent and contingent co-workers.

## **APPENDICES**

### **APPENDIX 1**

#### **Appendix 1.1: Interview questions.**

- 1- What is your age?
- 2- Your organisational position in your current organisation, is it a managerial or a non-managerial position?
- 3- What is the highest education level/qualification you have achieved until now?
- 4- For how long have you worked in your current organisation?
- 5- What is your definition of the concept of trust (in others)? What does the concept of trust mean to you?
- 6- Do you consider yourself to be a trusting person?
- 7- Do you have a co-worker at work with whom you have a strong trusting relationship?
- 8- Why do you trust this co-worker? What are the characteristics and behaviours of this co-worker that affected your trust in him?
- 9- Can you describe to me a situation or event that involved you and this co-worker, and that was a milestone event for trust formation towards this co-worker?
- 10- Do you have a co-worker at work who you distrust?
- 11- Why do you distrust this co-worker? What are the characteristics and behaviours of this co-worker that made you distrust him?
- 12- Can you describe to me a situation or event that involved you and this co-worker, and that was a milestone event for distrust formation towards this co-worker?

## **Appendix 1.2:** Sample of interview transcripts (4 interviews)

Interview number 3                      interview duration: 7:48 minutes                      Gender: Female

- Question 1: What is your age?
- Interviewee: 26 years
  
- Question 2: Your organisational position in your current organisation, is it a managerial or a non-managerial position?
- Interviewee: non-managerial
  
- Question 3: What is the highest education level/qualification you have achieved until now?
- Interviewee: Bachelor degree
  
- Question 4: For how long have you worked in your current organisation?
- Interviewee: 1 year and 5 months.
  
- Question 5: What is your definition of the concept of trust (in others)? What does the concept of trust mean to you?
- Interviewee: The person I trust is supposed to protect my back, whatever happens between us, stays between us, and if something happened to me, he/she will be my support, even if I did not ask him/her to be.
  
- Question 6: Do you consider yourself to be a trusting person?
- Interviewee: yes, I am not very careful with the individual when I meet him/her for the first time, I get adapt with the person quickly, but I do not give everything I have. When I understand the personality of this person, I began, gradually to interact with him/her.
  
- Question 7: Do you have a co-worker at work with whom you have a strong trusting relationship?

- Interviewee: yes
  
- Question 8: Why do you trust this co-worker? What are the characteristics and behaviours of this co-worker that affected your trust in him?
- Interviewee: whether in front of me or behind me this person is the same, do you understand me? Meaning, for example, I do not feel that if I am in front of this person she is very good and behind my back she becomes not very good, no. She is like, whatever situation is happening to me, she defends me. As characteristics, she is honest; she likes to make me understand everything at work, if there is something wrong, she would be like, no don't do that, meaning she like to advise me, (the Interviewee repeats some of the information provided previously), I sense that she feel towards me as I'm a sister of hers, and she loves me, and the nice thing about her is that 'her heart is on her tongue', if a problem occurred between me and her, she would tell me immediately, and she will not hide anything in her heart.
  
- Question 9: Can you describe to me a situation or event that involved you and this co-worker, and that was a milestone event for trust formation towards this co-worker?
- Interviewee: yes, we have in our company the certificate honoring the ideal employee. I was doing well at work, but I was never honored with the certificate and this had a strong effect on me. You know how a person is in this situation. So my co-worker did something (it was not very good for her) but she did it to help me get the ideal employee certificate. She stood up to the manager and said to the manager that I was the employee who deserved to be honored as the ideal employee the most. She defended me and did not tell anyone (it was between her and the manager without anyone knowing). After that I became the ideal employee. I felt gratitude towards her after this incident.
  
- Question 10: Do you have a co-worker at work who you distrust?
- Interviewee: yes

- Question 11: Why do you distrust this co-worker? What are the characteristics and behaviours of this co-worker that made you distrust him?
- Interviewee: This person has some form of hypocrisy, in my face she says 'oh my love' and behind my back she causes problems to me, she does not have honesty in dealings with others. Furthermore, there is not love or hate between me and her, but the nature of work is what makes us talk to each other, also he behaviour is not straightforward. She seems like a good person, but it seems that some things happened to her that made her feel that it necessary to not trust anyone or not like anyone. Also she is not the kind that hides things, meaning if she saw someone do wrong, even if no one paid attention to this wrong doing, she comes and says that there is something wrong and that person X did this wrong. A lot of my friends complain about her.
  
- Question 12: Can you describe to me a situation or event that involved you and this co-worker, and that was a milestone event for distrust formation towards this co-worker?
- Interviewee: yes, once there was tension between me and my manager (because I keep leaving my desk a lot and move a lot), so I told this co-worker that when I am in a certain place in the company, I will be working, so if anyone asks about me, tell them where I was. So after I told her that, I was to going to that place to work, the manager came and asked about me, so she told the manager that she did not know where I was. This thing made me not trust here. I did not hate here, but I stopped trusting here and I started to stay away from her.

***End of Interview Number 3***

Interview number 4      interview duration: 8:54 minutes      Gender: Male

- Question 1: What is your age?
- Interviewee: 25 years
  
- Question 2: Your organisational position in your current organisation, is it a managerial or a non-managerial position?
- Interviewee: non-managerial

- Question 3: What is the highest education level/qualification you have achieved until now?
- Interviewee: Bachelor degree
  
- Question 4: For how long have you worked in your current organisation?
- Interviewee: 6 months.
  
- Question 5: What is your definition of the concept of trust (in others)? What does the concept of trust mean to you?
- Interviewee: trust is, let us say, it's that I feel comfortable towards an individual. I trust this individual if I'm comfortable towards him and saw that he is fit for the responsibility that I am going to let him carry. The individual that I trust must be close to me before anything else. If me and the individual are friends to a great extent and in a strong way, if I saw that this individual can keep a secret, maintains everything, this individual I will trust.
  
- Question 6: Do you consider yourself to be a trusting person?
- Interviewee: no, I am careful at the beginning, when meeting for the first time.
  
- Question 7: Do you have a co-worker at work with whom you have a strong trusting relationship?
- Interviewee: yes
  
- Question 8: Why do you trust this co-worker? What are the characteristics and behaviours of this co-worker that affected your trust in him?
- Interviewee: the first thing is the time of our lives we spend together, the second thing is I untrusted him on more than one thing and he kept the secret, the third thing, is I rely on him. In terms of characteristics, he is an honest individual, he is straightforward with me, other are not straightforward. We know each other me and him. As my co-worker he covers for me and I cover for him. For example, he does my work when I have sick leave. I can depend on him to work without me asking

him or checking his work. There is affection between us and he is an individual with straight behavior.

- Question 9: Can you describe to me a situation or event that involved you and this co-worker, and that was a milestone event for trust formation towards this co-worker?
- Interviewee: he asked me to do something and I helped him with it, and afterwards, I was at leave one day and he covered my work.
  
- Question (Probing): is there another situation you can think of?
- Interviewee: no
  
- Question 10: Do you have a co-worker at work who you distrust?
- Interviewee: yes
  
- Question 11: Why do you distrust this co-worker? What are the characteristics and behaviours of this co-worker that made you distrust him?
- Interviewee: I did not feel comfortable towards him, this is maybe my nature. For example, I sit with you, I take from you everything and I don't give you anything about myself. This is who I am, if I'm comfortable towards you, I will start to develop my relationship with you and if I don't feel comfortable towards you, I will take a shortcut and won't try to feed my curiosity to get to know you more.
  
- Question (Probing): why didn't you feel comfortable towards this co-worker?
- Interviewee: his talking style, his treatment of others, I mean his behaviours are like those of a child (he's a child) and his behaviour is not mature.
  
- Question 12: Can you describe to me a situation or event that involved you and this co-worker, and that was a milestone event for distrust formation towards this co-worker?



- Interviewee: I am engaged, and my father and mother in law live very close to my workplace. Once I left the company to buy lunch, and he called me while I was out (the way he was talking to me was like he was trying to gather information from me). When I came back to the company, I found that everyone was saying to me ‘in good health, you ate at your father and mother in law house, and so and so’. So this immediately annoyed me and I stopped trusting him and I put an X on him. He did not see where I went. So, he should not say to others that I went to my in-laws to have lunch, the second thing, he spread things about me that are wrong to be spread in the company, as my co-worker he is supposed to not say anything. These things made me not trust him.

***End of Interview Number 4***

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**Interview number 7                      Duration: 16:39 minutes                      Gender: male**

- Question 1: what is your age?
- Interviewee: 37 years
  
- Question 2: Your organizational position in your current organization, is it a managerial or non-managerial position?
- Interviewee: non-managerial
  
- Question 3: what is the highest education level you have completed/achieved until now?
- Interviewee: Twajehe (i.e. final year of high school) and one semester in college
  
- Question 4: for how long have you worked in your current organization?
- Interviewee: 7 years
  
- Question 5: what is your definition of the concept of trust (in others)? What does the concept of trust mean to you?

- Interviewee: trust means that I trust another person firstly, since, first, if I give him/her any piece of information and asked him to not talk about it (like a secret), he has to keep this secret. Second, I trust the person that has capabilities, and not just a person who is only full of talk. This person has capabilities resulting from experiences and practices and behaviors also. To me, this is trust.
  
- Question 6: do you consider yourself to be a trusting person?
- Interviewee: yes, I place my trust in people a lot; this is my nature even if they have done something wrong to me once, twice, three times. This is my nature.
  
- Question 7: interviewer: do you have a co-worker/colleague at work with whom you have a strong trusting relationship?
- Interviewee: yes
  
- Question 8: why do you trust this co-worker? What are the characteristics and behaviours of this co-worker that affected your trust in him?
  
- Interviewee: First, he is religiously committed, he is a nice person, he maintains his prayers. Secondly, his ethics are high, and I love to deal with any person who has high morals. I mean, to be frank, ethics are important to me. In the area of work, when I want to or it's hard for me (pause), since his experience is more than mine, and his tenure at the job is more than mine, a lot of times I ask him about things, and he is good at work, so I benefit from him in terms of information, and he provides me with information without being stingy. So it's possible that this makes me have trust in him. Third, he praises me a lot and he encourages me a lot to finish my education and tells me that my level is higher than Tawjehi and that I must develop myself more. So he cares for me and loves me. Another thing, may be its silly, but it has an echo on me, let's suppose that he bought a mobile phone, for example, that costs a certain amount, he liked to change this phone, there are no issues with the phone, he only wants to sell it, possibly more than one would offer to buy the phone at the price he desires, however, he would offer it to me before everyone else. Once I asked about the price of the phone I bought from him, and they told me that it costs

more than the price I paid to him. We also have harmony in terms of thoughts and the interests such as sports.

- Question 9: Can you describe to me a situation or event that involved you and this co-worker, and that was a milestone event for trust formation towards this co-worker?
- Interviewee: other than what I mentioned before, I don't recall a situation, frankly.
  
- Question 10: interviewer: Do you have a co-worker at work who you distrust?
- Interviewee: yes
  
- Question 11: interviewer: Why do you distrust this co-worker? What are the characteristics and behaviours of this co-worker that made you not trust him/her?
- Interviewee: I heard from some people that I trust that this co-worker talked about me in a gathering and hinted at me in relation when talking about things related to my work. He accused me and offended me from nowhere, and he accused me using characteristics that do not exist in me.
- Question 12: Can you describe to me a situation or event that involved you and this co-worker, and that was a milestone event for distrust formation towards this co-worker?
- Interviewee: I will tell you, a problem happened once between me and him, I was working at the counter in my workplace, (this person is very good hearted, but at the same time, he is a man who thinks highly of himself a little bit and at the same time he has a temper and likes everyone to respond to him for example, even though he has a good relationship with the manager, he does not have status, he sometimes exploits his the manager), so like I said, I used to work at the 'transactions' department, and I used to service people from high and low classes. So this co-worker of mine, his thing was that wherever there is a good looking girl he would try to help her finish her transaction quickly and he would ask us to help him do that (within the boundaries of the law). So I used to help him a lot in that matter, but what I discovered is that he did not appreciate this help, I used to get surprised by him going and talking about me to others, if I asked him for something, I would get

surprised that he does not help me. So I provide you with services a lot, why act with me in an opposite manner?!! So, one time, the incident that happened, he came with two girls, he came to me, especially me, so what did I do? I let him (when I saw him coming) get closer to me and then I got up from my desk like I'm going to another place. So he got annoyed. Of course I did not do this based on nothing, but because there were previous accumulations. So this co-worker remained like he was waiting for me to slip up because of this. So one time, the manager asked him to go through the division and check if employees were wearing badges or not, and I didn't know, and employees usually wear the badges one day and in another ten days they would not, honestly, and sometimes we forget the badges because we were busy servicing customers. So he came to me early at 8:30 or 9 (of course he knows that I have a termagant tongue) and started asking employees where their badges are and his style was not civilized to treat employees this way in front of the customers. So I felt he wanted to harass me, so he asked where my badge in a very rude and provocative way, I opened my desk drawers trying to find it and pretended that I don't know where it is, and because of the way he talked to me I grabbed a drawer and slammed it shut and told him I don't want to wear the badge. So I started to swear at him and he would swear at me. Finally, when the problem got to management, everyone testified with me that I didn't do anything wrong. And I did not know that this person wrote a report complaining about me. so the manager called me and told me that my co-worker wrote a complaint report about me and that I should write one about him. So after this I got really upset with this guy.

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***End of Interview Number 7***

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Interview number 9                      Duration: 3.23 minutes                      Gender: male

- Question 1: interviewer: what is your age?
- Interviewee: 46 years
  
- Question 2: interviewer: Your organisational position in your current organisation, is it a managerial or a non-managerial position?

- Interviewee: non-managerial
  
- Question 3: What is the highest education level/qualification you have achieved until now?
- Interviewee: PHD
  
- Question 4: for how long have you worked in your current organisation?
- Interviewee: 16 years
  
- Question 5: what is your definition of the concept of trust (in others)? What does the concept of trust mean to you?
- Interviewee: trust is mutual respect and respecting oral and written agreements, (...pause...), when I give you my word to be honest and keep my word.
  
- Question 6: interviewer: do you consider yourself to be a trusting person?
- Interviewee: yes
  
- Question 7: Do you have a co-worker/colleague at work with whom you have a strong trusting relationship?
- Interviewee: yes
  
- Question 8: interviewer: Why do you trust this co-worker? What are the characteristics and behaviours of this co-worker that affected your trust in him/her?
- Interviewee: my feeling that this co-worker is honest and trustworthy and this lets me have trust in him.
  
- Question 9: Can you describe to me a situation or event that involved you and this co-worker, and that was a milestone event for trust formation towards this co-worker?
- Interviewee: I don't recall an incident currently

- Question 10: Do you have a co-worker at work who you distrust/ do not trust?
- Interviewee: yes
  
- Question 11: interviewer: Why do you distrust this co-worker? What are the characteristics and behaviours of this co-worker that made you distrust him?
- Interviewee: because he's dishonest; because my previous experiences with him showed me that he does not deserve to be trusted.
  
- Question 12: Can you describe to me a situation or event that involved you and this co-worker, and that was a milestone event for distrust formation towards this co-worker?
- Interviewee: an incident is that there was a certain conversation between me and him, and he promised me something and we agreed on something and when it was time to implement, he went and did something other than what we agreed on, this thing was at work of course. After this incident, I stopped trusting him and I started not believing him.

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***End of Interview Number 9***

## APPENDIX 2

**Appendix 2.1:** Item examples that reflect each theme identified in trust definitions provided by the Jordanian sample (n=20).

| Theme                 | Examples of items that reflect each theme  | Source scale<br>(title and author)  |
|-----------------------|--|---|
| 1-Comfortableness     | - I would be comfortable giving (____) a task or problem which was critical to me, even if I could not monitor his/her (its) actions.  | Organisational trust<br>(Mayer and Gavin, 2005; Mayer and Davis, 1999).   |
| 2- Reassurance        | - I would be willing to let (____) have complete control over my future in this company.   | Organisational trust<br>(Mayer and Gavin, 2005; Mayer and Davis, 1999).   |
| 3- Safeness           | -A) I would tell (____) about mistakes I've made on the job, even if they could damage my reputation.<br>- B) How willing are you to do the following with your (____)? Discuss work-related problems or difficulties with him/her that could potentially be used to disadvantage you. | A) Organisational trust<br>(Mayer and Gavin, 2005; Mayer and Davis, 1999).<br>B) Behavioural Trust Inventory (Gillespie, 2003). |
| 4- Disclosure         | - How willing are you to do the following with your (____)? Confide in him/her about personal issues that are affecting your work.   | Behavioural Trust Inventory (Gillespie, 2003).  |
| 5- Keeping of secrets | - (____) would not knowingly do anything to hurt me.   | Benevolence (Mayer and Davis, 1999).  |

*Note.* Continue appendix 2.1 next page.

| Theme                        | Examples of items that reflect each theme   | Source scale<br>(title and author)  |
|------------------------------|---|---|
| 6- Absence of ill intentions | - (____) would not knowingly do anything to hurt me.  | Benevolence (Mayer and Davis, 1999).  |
| 7- Intimacy                  | - A) We have a sharing relationship. We can both freely share out ideas, feelings and hopes.<br>- B) I would have to say that we have both made considerable emotional investments in our working relationship.<br>- C) we would both feel a sense of loss if one of us was transferred and we could no longer work together. | A&B&C) Managerial Interpersonal Trust Instrument / affect-based trust (McAllister, 1995).                                       |
| 8- Openness                  | - A) How willing are you to do the following with your (____)? Share your personal beliefs with him/her.<br>- B) Discuss how you honestly feel about your work, even negative feelings and frustration.<br>- C) I would share my opinion about sensitive issues with (____) even if my opinion were unpopular.                | A&B) Behavioural Trust Inventory (Gillespie, 2003).<br>C) Organisational trust (Mayer and Gavin, 2005).                         |
| 9- Carelessness              | - A) I really wish I had a good way to keep an eye on (____)*.<br>- B) if (____) asked me for something, I respond without thinking about whether it might be held against me.  | A) Organisational trust.<br>(Mayer and Gavin, 2005; Mayer and Davis, 1999).<br>B) Organisational trust (Mayer and Gavin, 2005). |

*Note.* Continue appendix 2.1 next page.



| Theme             | Examples of items that reflect each theme   | Source scale<br>(title and author)   |
|-------------------|---|--|
| 10- Concern       | <ul style="list-style-type: none"> <li>- A) (_____) really looks out for what is important to me.</li> <li>- B) (_____) is very concerned about my welfare.</li> </ul>  | A&B) Benevolence<br>(Mayer and Davis, 1999).   |
| 11- Dedication    | <ul style="list-style-type: none"> <li>- A) We feel that (____) tries to get out of its commitments*.</li> <li>- B) This person approaches his/her job with professionalism and dedication.</li> </ul>  | A) Organizational Trust Inventory<br>(Cummings & Bromiley, 1996).<br>B) Managerial Interpersonal Trust Instrument / cognition-based trust<br>(McAllister, 1995).   |
| 12- Dependability | <ul style="list-style-type: none"> <li>- A) In our opinion, (____) is reliable.</li> <li>- B) (____) will go out of its way to help me.</li> <li>- C) How willing are you to do the following with your (____)? Rely on his/her task related skills and abilities.</li> <li>- D) depend on him/her to back you up in difficult situations.</li> <li>- E) I can rely on this person not to make my job more difficult by careless work.</li> </ul> | A) Organizational Trust Inventory<br>(Cummings & Bromiley, 1996).<br>B) Benevolence<br>(Mayer and Davis, 1999).<br>C&D) Behavioural Trust Inventory<br>(Gillespie, 2003).<br>E) Managerial Interpersonal Trust Instrument / cognition-based trust<br>(McAllister, 1995). |

*Note.* Continue appendix 2.1 next page.

| Theme               | Examples of items that reflect each theme   | Source scale<br>(title and author)  |
|---------------------|---|---|
| 13- Respect         | <ul style="list-style-type: none"> <li>- A) We feel that (____) will keep its word.</li> <li>- B) I never have to wonder whether (____) will stick to its word.</li> </ul>  | A) Organizational Trust Inventory (Cummings & Bromiley, 1996).<br>B) Integrity (Mayer and Davis, 1999).   |
| 14- Cooperation     | NA  | NA  |
| 16- Sincerity       | <ul style="list-style-type: none"> <li>- A) I never have to wonder whether (____) will stick to its word.</li> <li>- B) We feel that (____) negotiates with us honestly.</li> <li>- C) We think (____) does not mislead us.</li> </ul>  | A) Integrity (Mayer and Davis, 1999).<br>B&C) Organizational Trust Inventory (Cummings & Bromiley, 1996). |
| 17- No exploitation | <ul style="list-style-type: none"> <li>- A) We think that people in (____) succeed by stepping on other people*.</li> <li>- B) We think that (____) takes advantage of our problems*.</li> <li>- C) We feel that (____) takes advantage of people who are vulnerable*.</li> </ul> | A&B&C) Organizational Trust Inventory (Cummings & Bromiley, 1996).  |

*Note.* (\_\_\_\_) describes the respective trust referent. An (\*) indicates a reverse-scored item.

**Appendix 2.2:** Item examples that reflect each trust antecedent identified in critical incidents reported by the Jordanian sample (n=18).

| Antecedent                        | Examples of items that reflect each antecedent  | Source scale<br>(title and author)   |
|-----------------------------------|---|--|
| 1- Concern                        | <ul style="list-style-type: none"> <li>- A) (_____) really looks out for what is important to me.</li> <li>- B) (____) is very concerned about my welfare.</li> </ul>   | A&B) Benevolence<br>(Mayer and Davis, 1999).   |
| 2- Sincerity                      | <ul style="list-style-type: none"> <li>- A) (____) are sincere in their attempts to meet the workers' point of view about the job.</li> <li>- B) Most (____) are honest and truthful about information to do with the job.</li> <li>- C) (_____) really looks out for what is important to me.</li> <li>- D) We think that (____) does not mislead us.</li> </ul> | A&B) (Clark and Payne, 1997).<br>C) Benevolence<br>(Mayer and Davis, 1999).<br>D) Organizational Trust Inventory<br>(Cummings & Bromiley, 1996). |
| 3- Support in personal situations | <ul style="list-style-type: none"> <li>- A) (_____) really looks out for what is important to me.</li> <li>- B) (____) will go out of its way to help me.</li> <li>- C) (____) is well qualified.</li> <li>- D) (____) has much knowledge about the work that needs done.</li> </ul>  | A&B) Benevolence<br>(Mayer and Davis, 1999).<br>C&D) Ability (Mayer and Davis, 1999).  |
| 4- Protection                     | <ul style="list-style-type: none"> <li>- A) (_____) really looks out for what is important to me.</li> <li>- B) (____) will go out of its way to help me.</li> </ul>  | A&B) Benevolence<br>(Mayer and Davis, 1999).   |
| 5- Support in work situations     | <ul style="list-style-type: none"> <li>- A) (_____) really looks out for what is important to me.</li> <li>- B) (____) will go out of its way to help me.</li> <li>- C) (____) is well qualified.</li> <li>- D) (____) has much knowledge about the work that needs done.</li> </ul>  | A&B) Benevolence<br>(Mayer and Davis, 1999).<br>C&D) Ability (Mayer and Davis, 1999).  |

*Note.* Continue appendix 2.2 next page.

| Antecedent            | Examples of items that reflect each antecedent   | Source scale<br>(title and author)  |
|-----------------------|--|---|
| 6- Reciprocity        | NA   | NA  |
| 7- Keeping of secrets | - A) (____) would not knowingly do anything to hurt me.<br>- B) My (____) keeps confidences.   | A) Benevolence<br>(Mayer and Davis, 1999).<br>B) Predictability, integrity and benevolence<br>(Shockley-Zalabak et al, 2000). |
| 8- Empathy            | - A) I can talk freely to this individual about difficulties I am having at work and know that (s)he will want to listen.<br>- B) (____) listens to employees' concerns. | A) Managerial Interpersonal Trust Instrument<br>(McAllister, 1995).<br>B) (Shockley-Zalabak et al., 2000).                    |
| 9- Capability         | - A) (____) is known to be successful at the things it tries to do.<br>- B) (____) is very capable of performing its job.<br>- C) (____) is well qualified.              | A&B&C) Ability<br>(Mayer and Davis, 1999).  |
| 10- Upright behaviour | - Sound principles seem to guide (____)'s behaviour.   | Integrity (Mayer and Davis, 1999).  |

*Note.* (\_\_\_\_) describes the respective trust referent. An (\*) indicates a reverse-scored item.

**Appendix 2.3:** Item examples that reflect each trust antecedent identified in explicit answers provided by the Jordanian sample (n=20).

| Antecedent                  | Examples of items that reflect each antecedent   | Source scale (title and author)   |
|-----------------------------|--|---|
| 1- Honesty                  | <ul style="list-style-type: none"> <li>- A) (_____) is not always honest and truthful*.</li> <li>- B) Most (_____) are honest and truthful about information to do with the job.</li> <li>- C) We think the people in (_____) tell the truth in negotiations.</li> </ul> | <ul style="list-style-type: none"> <li>A) (Robinson, 1996).</li> <li>B) (Clark and Payne, 1997).</li> <li>C) Organizational Trust Inventory (Cummings &amp; Bromiley, 1996).</li> </ul> |
| 2- Consideration            | <ul style="list-style-type: none"> <li>- A) My views are considered when decisions are made.</li> <li>- B) My (_____) considers my views when decisions are made.</li> </ul>   | A&B) (Tyler, 2003).   |
| 3- Reciprocity              | NA   | NA  |
| 4- Common characteristics   | <ul style="list-style-type: none"> <li>- A) I feel connected to my peers.</li> <li>- B) My values are similar to the values of my peers.</li> </ul>  | A&B) (Shockley-Zalabak et al., 2000).   |
| 5- Capability               | <ul style="list-style-type: none"> <li>- A) (_____) is known to be successful at the things it tries to do.</li> <li>- B) (_____) is very capable of performing its job.</li> <li>- C) (_____) has much knowledge about the work that needs done.</li> </ul>             | A&B&C) Ability (Mayer and Davis, 1999).   |
| 6- Acting Justly            | <ul style="list-style-type: none"> <li>- (_____) tries hard to be fair in dealings with others.</li> </ul>   | Integrity (Mayer and Davis, 1999).  |
| 7- Physical characteristics | NA   | NA  |

*Note.* Continue appendix 2.3 next page.

| Antecedent              | Examples of items that reflect each antecedent  | Source scale (title and author)  |
|-------------------------|---|--|
| 8- Religious commitment | <ul style="list-style-type: none"> <li>- A) We feel that (_____) tries to get out of its commitments*.</li> <li>- B) (_____) keeps its commitments to employees.</li> <li>- C) My (_____) keeps his/her commitments to team members.</li> <li>- D) Sound principles seem to guide (_____)’s behaviour.</li> </ul> | <ul style="list-style-type: none"> <li>A) Organizational Trust Inventory (Cummings &amp; Bromiley, 1996)</li> <li>B&amp;C) (Shockley-Zalabak et al., 2000)</li> <li>D) Integrity (Mayer and Davis, 1999).</li> </ul> |
| 9- Morality             | <ul style="list-style-type: none"> <li>- Sound principles seem to guide (_____)’s behaviour.</li> </ul>   | Integrity (Mayer and Davis, 1999).   |
| 10- Responsibility      | <ul style="list-style-type: none"> <li>- Sound principles seem to guide (_____)’s behaviour.</li> </ul>   | Integrity (Mayer and Davis, 1999).   |
| 11- Concern             | <ul style="list-style-type: none"> <li>- A) (_____) really looks out for what is important to me.</li> <li>- B) (_____) is very concerned about my welfare.</li> </ul>  | A&B) Benevolence (Mayer and Davis, 1999).  |
| 12- Intimacy            | <ul style="list-style-type: none"> <li>- We have a sharing relationship. We can both freely share out ideas, feelings and hopes.</li> </ul>   | Managerial Interpersonal Trust Instrument / affect-based trust (McAllister, 1995).   |
| 13- Upright behaviour   | <ul style="list-style-type: none"> <li>- Sound principles seem to guide (_____)’s behaviour.</li> </ul>   | Integrity (Mayer and Davis, 1999).   |
| 14- Keeping of secrets  | <ul style="list-style-type: none"> <li>- A) (_____) would not knowingly do anything to hurt me.</li> <li>- B) My (_____) keeps confidences.</li> </ul>  | <ul style="list-style-type: none"> <li>A) Benevolence (Mayer and Davis, 1999)</li> <li>B) (Shockley-Zalabak et al., 2000).</li> </ul>  |

*Note.* Continue appendix 2.3 next page.

| Antecedent          | Examples of items that reflect each antecedent  | Source scale (title and author)  |
|---------------------|---|--|
| 15- Probity in work | <ul style="list-style-type: none"> <li>- A) I believe my (____) has high integrity</li> <li>- B) (____) is known to be successful at the things it tries to do.</li> <li>- C) Sound principles seem to guide (____)'s behaviour.</li> </ul>   | <p>A) (Robinson, 1996).</p> <p>B&amp;C) Ability / Integrity (Mayer and Davis, 1999).</p>   |
| 16- Support         | <ul style="list-style-type: none"> <li>- A) (____) really looks out for what is important to me.</li> <li>- B) (____) will go out of its way to help me.</li> <li>- C) (____) is well qualified.</li> <li>- D) (____) has much knowledge about the work that needs done.</li> </ul> | <p>A&amp;B) Benevolence (Mayer and Davis, 1999).</p> <p>C&amp;D) Ability (Mayer and Davis, 1999).</p>                              |
| 17- Dependability   | <ul style="list-style-type: none"> <li>- A) In our opinion, (____) is reliable.</li> <li>- B) How willing are you to do the following with your (____)? Rely on his/her task related skills and abilities.</li> </ul>   | <p>A) Organizational Trust Inventory (Cummings &amp; Bromiley, 1996).</p> <p>B) Behavioural Trust Inventory (Gillespie, 2003).</p> |
| 18- Kindness        | <ul style="list-style-type: none"> <li>- A) If I shared my problems with this person, I know that (s)he would respond constructively and caringly.</li> <li>- B) My needs and desires are very important to (____)</li> </ul>   | <p>A) Managerial Interpersonal Trust Instrument (McAllister, 1995)</p> <p>B) Benevolence (Mayer and Davis, 1999).</p>              |
| 19- Understanding   | <ul style="list-style-type: none"> <li>- My (____) avoids retaliation when mistakes have been made. benev</li> </ul>  | <p>(Shockley-Zalabak et al., 2000).</p>  |

*Note.* Continue appendix 2.3 next page.

| Antecedent          | Examples of items that reflect each antecedent   | Source scale (title and author)                               |
|---------------------|--|---|
| 20- Protection      | - A) (_____) really looks out for what is important to me.<br>- B) (_____) will go out of its way to help me.    | A&B) Benevolence (Mayer and Davis, 1999).                     |
| 21- Educated        | - (_____) is well qualified.   | Ability (Mayer and Davis, 1999).                              |
| 22- Being trusted   | - Most people, even those who aren't close friends of this individual, trust and respect her/him as a co-worker. | Managerial Interpersonal Trust Instrument (McAllister, 1995). |
| 23- Loyalty         | - (_____) would not knowingly do anything to hurt me.  | Benevolence (Mayer and Davis, 1999).                          |
| 24- Good intentions | - In general, I believe my (_____)’s motives and intentions are good.  | (Robinson, 1996).   |

*Note.* (\_\_\_\_) describes the respective trust referent. An (\*) indicates a reverse-scored item.



**Appendix 2.4:** Item examples that reflect each distrust antecedent identified in critical incidents reported by the Jordanian sample (n=19).

| Antecedent          | Examples of items that reflect each antecedent  | Source scale (title and author)  |
|---------------------|---|--|
| 1- Credit thief     | <ul style="list-style-type: none"> <li>- A) We think that people in (_____) succeed by stepping on other people*.</li> <li>- B) (_____) takes the credit for success without acknowledging the workmen's contribution*.</li> <li>- C) My (_____) attempts to make himself/herself look good at the expense of others*.</li> <li>- D) My (_____) takes all the credit, gives none*.</li> </ul> | <p>A) Organizational Trust Inventory (Cummings &amp; Bromiley, 1996).</p> <p>B) (Clark and Payne, 1997).</p> <p>C&amp;D) (Shockley-Zalabak et al., 2000).</p>  |
| 2- Incompatibility  | - I like (_____)’s values.  | Integrity (Mayer and Davis, 1999).   |
| 3- Promise breaking | - I trust that (_____) will keep the promises that they make.   | (Spreitzer and Mishra, 1999).  |
| 4- Incapability     | - (_____) is very capable of performing its job.  | Ability (Mayer and Davis, 1999).   |
| 5- Disappointing    | <ul style="list-style-type: none"> <li>- A) I never have to wonder whether (_____) will stick to its word.</li> <li>- B) We feel that (_____) will keep its word.</li> <li>- C) I trust that (_____) take actions that are consistent with their words.</li> </ul>  | <p>A) Integrity (Mayer and Davis, 1999).</p> <p>B) Organizational Trust Inventory (Cummings &amp; Bromiley, 1996).</p> <p>C) (Spreitzer and Mishra, 1999).</p> |

*Note.* Continue appendix 2.4 next page.

| Antecedent              | Examples of items that reflect each antecedent  | Source scale (title and author)   |
|-------------------------|---|---|
| 6- Selfish              | <ul style="list-style-type: none"> <li>- A) I trust that (_____) place our organisation's interests above their own.</li> <li>- B) In our organisation most people are looking out for themselves only*.</li> </ul>   | <p>A) (Spreitzer and Mishra, 1999).</p> <p>B) (Shockley-Zalabak et al., 2000).</p>                    |
| 7- Non reciprocity      | NA  | NA  |
| 8- Gossiping            | - My (____) avoids gossip.  | (Shockley-Zalabak et al., 2000).  |
| 9- Betrayal of trust    | <ul style="list-style-type: none"> <li>- A) (____) would not knowingly do anything to hurt me.</li> <li>- B) My (____) keeps confidences.</li> </ul>  | <p>A) Benevolence (Mayer and Davis, 1999).</p> <p>B) (Shockley-Zalabak et al., 2000).</p>             |
| 10- Ill intent          | - In general, I believe my (____)'s motives and intentions are good.  | (Robinson, 1996).   |
| 11- Information fishing | - (____) would not knowingly do anything to hurt me.  | Benevolence (Mayer and Davis, 1999).  |
| 12- Being distrusted    | - Most people, even those who aren't close friends of this individual, trust and respect her/him as a co-worker.  | Managerial Interpersonal Trust Instrument (McAllister, 1995).   |
| 13- Not supportive      | <ul style="list-style-type: none"> <li>- A) (____) really looks out for what is important to me.</li> <li>- B) (____) will go out of its way to help me.</li> <li>- C) (____) is well qualified.</li> <li>- D) (____) has much knowledge about the work that needs done.</li> </ul> | <p>A&amp;B) Benevolence (Mayer and Davis, 1999).</p> <p>C&amp;D) Ability (Mayer and Davis, 1999).</p> |

*Note.* Continue appendix 2.4 next page.

| Antecedent      | Examples of items that reflect each antecedent       | Source scale (title and author)      |
|-----------------|--|--------------------------------------|
| 14- Provocative | - (____) would not knowingly do anything to hurt me. | Benevolence (Mayer and Davis, 1999). |

*Note.* (\_\_\_\_) describes the respective trust referent. An (\*) indicates a reverse-scored item.

**Appendix 2.5:** Item examples that reflect each distrust antecedent identified in explicit answers provided by the Jordanian sample (n=20).

| Antecedent             | Examples of items that reflect each antecedent   | Source scale<br>(title and author)   |
|------------------------|--|--|
| 1- Lying               | -A) (____) is not always honest and truthful*. (Integrity)<br>- B) Most (____) are honest and truthful about information to do with the job. (integrity)                               | A) (Robinson, 1996).<br>B) (Clark and Payne, 1997).                            |
| 2- Information fishing | - (____) would not knowingly do anything to hurt me.   | Benevolence (Mayer and Davis, 1999).   |
| 3- Incapability        | - (____) is very capable of performing its job.  | Ability (Mayer and Davis, 1999).   |
| 4- Selfish             | - A) I trust that (____) place our organisation's interests above their own. (Benevolence)<br>- B) In our organisation most people are looking out for themselves only*. (Benevolence) | A) (Spreitzer and Mishra, 1999).<br>B) (Shockley-Zalabak et al., 2000).        |
| 5- Gossiping           | - My (____) avoids gossip. (Integrity)   | (Shockley-Zalabak et al., 2000).   |
| 6- Betrayal of trust   | - A) (____) would not knowingly do anything to hurt me.<br>- B) My (____) keeps confidences.   | A) Benevolence (Mayer and Davis, 1999).<br>B) (Shockley-Zalabak et al., 2000). |
| 7- Promise breaking    | - I trust that (____) will keep the promises that they make. (Integrity and predictability)  | (Spreitzer and Mishra, 1999).  |
| 8- Moodiness           | - (____)'s actions and behaviours are not very consistent*. (Predictability)   | Integrity (Mayer and Davis, 1999).   |

*Note.* Continue appendix 2.5 next page.

| Antecedent                   | Examples of items that reflect each antecedent  | Source scale<br>(title and author)   |
|------------------------------|---|--|
| 9- Antisocial behaviours     | - A) (____) would not knowingly do anything to hurt me.<br>- B) Sound principles seem to guide (____)'s behaviour   | A) Benevolence (Mayer and Davis, 1999).<br>B) Integrity (Mayer and Davis, 1999).   |
| 10- Uncommon characteristics | - A) I feel connected to my peers. (Identification)<br>- B) My values are similar to the values of my peers. (Identification)   | A&B) (Shockley-Zalabak et al., 2000).  |
| 11- Hypocrisy                | - A) (____) are sincere in their attempts to meet the workers' point of view about the job. (Benevolence and integrity)<br>- B) (____) really looks out for what is important to me.                            | A) (Clark and Payne, 1997).<br>B) Benevolence (Mayer and Davis, 1999).             |
| 12- Unattractiveness         | - A) (____) is well qualified.<br>- B) (____) has much knowledge about the work that needs done.  | A&B) Ability (Mayer and Davis, 1999).  |
| 13- Reciprocity              | NA  | NA   |
| 14- Not supportive           | - A) (____) really looks out for what is important to me.<br>- B) (____) will go out of its way to help me.<br>- C) (____) is well qualified.<br>- D) (____) has much knowledge about the work that needs done. | A&B) Benevolence (Mayer and Davis, 1999).<br>C&D) Ability (Mayer and Davis, 1999). |
| 15- Neutral emotions         | - (____) is very concerned about my welfare.  | Benevolence (Mayer and Davis, 1999).   |
| 16- Envy                     | - (____) is very concerned about my welfare.  | Benevolence (Mayer and Davis, 1999).   |

*Note.* (\_\_\_\_) describes the respective trust referent. An (\*) indicates a reverse-scored item.

## APPENDIX 3

### Appendix 3.1: Information sheet (Informed consent).

#### Trust in Co-workers Informed consent



Dear respondent,,,

Please read the following information and decide whether or not to participate in this study.

#### **Study description:**

- This study is part of a PhD research project whose aim is to understand and identify the antecedents and outcomes of trust between permanent and contingent co-workers. Your responses are important in enabling me to obtain as full an understanding as possible of this topic.
- You will also be asked for basic demographic information (e.g. age, gender).
- The questionnaire will take approximately 20 to 25 minutes to complete.

#### **Further important details:**

- This research is carried out in accordance with the ethical guidelines of Durham University. This entails that:
  - Your participation is entirely voluntary. You may withdraw at any time during the study. You may also withdraw your data within a period of one week, should you regret your participation.
  - Your data will be held confidentially and may be stored for a period of five years after the appearance of any associated scientific publications
  - You will be able to obtain feedback about the results of this research if you request such feedback.
- There are no physical or mental risks of participating in this study.

- If you have any further questions about this study, please ask for clarification before handing back the questionnaire.
- Please note that by filling in this questionnaire you give your consent to taking part in the study. To keep your participation anonymous, I refrain from asking you to sign an informed consent form.

**Researcher:**

Ahmad Obeidat

Durham Business School - Durham University

E-mail: a.m.obeidat@durham.ac.uk

### **Appendix 3.2: Questionnaire (English version).**

#### Part one: Background information.

Please give me some information about yourself. This information will only be used to describe the group of participants, not identify any individual. Please tick the appropriate box, or fill in the blank.

A- Age: (\_\_\_\_\_)

B- Gender:

☐ Male

☐ Female

C- How long have you worked in (*organisation name*)? (\_\_\_\_\_)

D- What is your employment status within (*organisation name*)?

☐ Permanent employee: for example (*example of the type of permanent work arrangement present in the respective organisation*).

☐ Contingent employee: for example (*examples of the types of contingent work arrangements present in the respective organisation*).

E- Education: please indicate the highest level of education you have completed:

☐ High school degree or equivalent

☐ Bachelor's degree or equivalent

☐ Graduate degree or equivalent

☐ Professional degree or equivalent

☐ Other, please specify, (\_\_\_\_\_)

F- What business sector do you work in?

☐ Education

☐ Telecommunication

☐ Government

☐ Hospitality

☐ Other, please specify, (\_\_\_\_\_)

#### Part two: Questionnaire.



For the following questions, please ensure that you respond to all statements in an honest manner and without leaving any blank. Your responses will be kept in *absolute confidence*. If you are not sure about your answer, please choose the answer closest to your opinion. Please read each statement carefully, and then tick the appropriate number next to each statement.

Propensity to trust scale:

**Question 1:** Please indicate for each statement the extent to which you agree or disagree with that statement.

| Strongly<br>Disagree | Disagree | Neither Agree<br>nor Disagree | Agree | Strongly Agree |
|----------------------|----------|-------------------------------|-------|----------------|
| 1                    | 2        | 3                             | 4     | 5              |

**Statements:**

- 1- I believe that others have good intentions.
- 2- I trust what people say.
- 3- I am wary of others.\*
- 4- I think that all will be well.
- 5- I believe that people are essentially evil.\*
- 6- I believe that people are basically moral.
- 7- I suspect hidden motives in others.\*
- 8- I believe in human goodness.

*Note.* An (\*) signifies a reverse scored item.

Trust climate scale:

**Question 2:** Please indicate for each statement the extent to which you agree or disagree with that statement.

| Strongly<br>Disagree | Disagree | Neither Agree<br>nor Disagree | Agree | Strongly Agree |
|----------------------|----------|-------------------------------|-------|----------------|
| 1                    | 2        | 3                             | 4     | 5              |

Statements:

- 1- I believe that most people in this workplace have good intentions.
- 2- I have faith/trust in the promises or statements of colleagues (co-workers) here.
- 3- I have faith/trust in the promises or statements of supervisors here.
- 4- I have faith/trust in the promises or statements of area managers here (e.g. department heads).
- 5- I have faith/trust in the promises or statements of senior managers here (e.g. top management, CEO).

The following questions (3, 4 and 5) refer to your views on a co-worker with whom you have worked closely (e.g. works on your same department), and who are or were on a temporary contract –for example (*example of the type of contingent co-worker working in the respective organisation*). If you have worked with more than one contingent co-worker, please think about the one you have worked with most closely.

Ability, benevolence and integrity of **contingent** co-worker scales:

**Question 3:** Concerning this contingent co-worker, please indicate the extent to which you agree or disagree with the following statements (if you have more than one contingent co-worker, please think about the one you most closely work with).

| Strongly<br>Disagree | Disagree | Neither Agree<br>nor Disagree | Agree | Strongly Agree |
|----------------------|----------|-------------------------------|-------|----------------|
| 1                    | 2        | 3                             | 4     | 5              |

Statements:

- 1- Is very capable of performing his/her job.
- 2- Is known to be successful at the things he/she tries to do.
- 3- Has a lot of knowledge about the work that needs to be done.
- 4- I feel confident about my contingent co-worker's skills.
- 5- Is well qualified.
- 6- Has specialized capabilities that can increase our performance.
- 7- Is very concerned about my welfare.
- 8- My needs and desires are very important to my temporary co-worker.
- 9- Would not knowingly do anything to hurt me.
- 10- Really looks out for what is important to me.
- 11- Will go out of his/her way to help me.
- 12- Has a strong sense of justice.
- 13- I never have to wonder whether my contingent co-worker will stick to his/her word.
- 14- Tries hard to be fair in dealings with others.
- 15- I like my contingent co-worker's values.
- 16- Sound principles seem to guide my contingent co-worker's behaviour.

Trust in *contingent* co-worker scale:

**Question 4:** Still keeping in mind the same contingent co-worker, please indicate how willing are you to engage in the following behaviours?

| Not at all willing | Slightly willing | Moderately willing | Very willing | Completely willing |
|--------------------|------------------|--------------------|--------------|--------------------|
| 1                  | 2                | 3                  | 4            | 5                  |

Statements:

How willing are you to....

- 1- rely on your contingent coworker's work related judgment?
- 2- rely on your contingent coworker's task related skills and abilities?
- 3- depend on your contingent coworker to handle an important issue on your behalf?
- 4- rely on your contingent coworker to represent your work accurately to others?
- 5- depend on your contingent coworker to back you up in difficult situations?
- 6- share your personal feelings with your contingent coworker?
- 7- confide in your contingent coworker about personal issues that are affecting your work?
- 8- discuss honestly how you feel about your work, even negative feelings and frustration?
- 9- discuss work-related problems or difficulties that could potentially be used to disadvantage you?
- 10- share your personal beliefs with your contingent coworker?

Antisocial work behaviour (items 1 to 6) and Interpersonal citizenship behaviour towards *contingent* co-worker (person-focused & task-focused) scales:

**Question 5:** Please indicate for each of the following behaviours how often you engaged in that behaviour when the target of that behaviour was the respective contingent co-worker during the period you worked with them.

| Never | Rarely | Occasionally | Often | Very often |
|-------|--------|--------------|-------|------------|
| 1     | 2      | 3            | 4     | 5          |

Statements:

- 1- Saying or doing something to purposely hurt my contingent co-worker while at work.
- 2- Saying unkind things to purposely harm my contingent co-worker while at work.
- 3- Doing unkind things to purposely harm my contingent co-worker while at work.
- 4- Criticizing my contingent co-worker while at work.
- 5- Saying nasty things to my contingent co-worker while at work.
- 6- Starting arguments with my contingent co-worker while at work.
- 7- Listening to my contingent co-worker when he/she have to get something off their chest.
- 8- Taking time to listen to my contingent co-worker problems and worries.
- 9- Taking a personal interest in my contingent co-worker.
- 10- Showing concern and courtesy toward my contingent co-worker, even under the most trying business situations.
- 11- Making an extra effort to understand the problems faced by my contingent co-worker.
- 12- Always going out of the way to make newer employees feel welcome in the work group.
- 13- Trying to cheer up my contingent co-worker who is having a bad day.
- 14- Complimenting my contingent co-worker when he/she succeeds at work.
- 15- Taking on extra responsibilities in order to help my contingent co-worker when things get demanding at work.
- 16- Helping my contingent co-worker with difficult assignments, even when assistance is not directly requested.
- 17- Assisting my contingent co-worker with heavy workloads even though it is not part of job.
- 18- Helping my contingent co-worker who is running behind in his/her work activities.
- 19- Helping my contingent co-worker with work when he/she has been absent.
- 20- Going out of way to help my contingent co-worker with work related problems.

*Note.* In the questionnaire, antisocial work behavior items were mixed-up with the ICB items.

The following questions (6, 7 and 8) refer to your views on a co-worker with whom you have worked closely, and who are or were on a permanent contract –for example (example of the type of permanent co-worker working in the respective organisation). If you have worked with more than one permanent co-worker, please think about the one you have worked with most closely.

Ability, benevolence and integrity of **permanent** co-worker scales:

**Question 6:** *Concerning this permanent co-worker, please indicate the extent to which you agree or disagree with the following statements (if you have more than one permanent co-worker, please think about the one you most closely work with).*

| Strongly<br>Disagree | Disagree | Neither Agree<br>nor Disagree | Agree | Strongly Agree |
|----------------------|----------|-------------------------------|-------|----------------|
| 1                    | 2        | 3                             | 4     | 5              |

Statements:

- 1- Is very capable of performing his/her job.
- 2- Is known to be successful at the things he/she tries to do.
- 3- Has a lot of knowledge about the work that needs to be done.
- 4- I feel confident about my permanent co-worker's skills.
- 5- Is well qualified.
- 6- Has specialized capabilities that can increase our performance.
- 7- Is very concerned about my welfare.
- 8- My needs and desires are very important to my permanent co-worker.
- 9- Would not knowingly do anything to hurt me.
- 10- Really looks out for what is important to me.
- 11- Will go out of his/her way to help me.
- 12- Has a strong sense of justice.
- 13- I never have to wonder whether my permanent co-worker will stick to his/her word.
- 14- Tries hard to be fair in dealings with others.
- 15- I like my permanent co-worker's values.
- 16- Sound principles seem to guide my permanent co-worker's behaviour.

Trust in *permanent* co-worker scale:

**Question 7:** Still keeping in mind the same permanent co-worker, please indicate how willing are you to engage in the following behaviours?

| Not at all<br>willing | Slightly willing | Moderately<br>willing | Very willing | Completely<br>willing |
|-----------------------|------------------|-----------------------|--------------|-----------------------|
| 1                     | 2                | 3                     | 4            | 5                     |

Statements:

How willing are you to....

- 1- rely on your permanent coworker's work related judgment?
- 2- rely on your permanent coworker's task related skills and abilities?
- 3- depend on your permanent coworker to handle an important issue on your behalf?
- 4- rely on your permanent coworker to represent your work accurately to others?
- 5- depend on your permanent coworker to back you up in difficult situations?
- 6- share your personal feelings with your permanent coworker?
- 7- confide in your permanent coworker about personal issues that are affecting your work?
- 8- discuss honestly how you feel about your work, even negative feelings and frustration?
- 9- discuss work-related problems or difficulties that could potentially be used to disadvantage you?
- 10- share your personal beliefs with your permanent coworker?

Antisocial work behaviour (items 1 to 6) and Interpersonal citizenship behaviour towards *permanent* co-worker (person-focused & task-focused) scales:

**Question 8:** Please indicate for each of the following behaviours how often you engaged in that behaviour when the target of that behaviour was the respective permanent co-worker during the period you worked with them.

| Never | Rarely | Occasionally | Often | Very often |
|-------|--------|--------------|-------|------------|
| 1     | 2      | 3            | 4     | 5          |

Statements:

- 1- Saying or doing something to purposely hurt my permanent co-worker while at work.
- 2- Saying unkind things to purposely harm my permanent co-worker while at work.
- 3- Doing unkind things to purposely harm my permanent co-worker while at work.
- 4- Criticizing my permanent co-worker while at work.
- 5- Saying nasty things to my permanent co-worker while at work.
- 6- Starting arguments with my permanent co-worker while at work.
- 7- Listening to my permanent co-worker when he/she have to get something off their chest.
- 8- Taking time to listen to my permanent co-worker problems and worries.
- 9- Taking a personal interest in my permanent co-worker.
- 10- Showing concern and courtesy toward my permanent co-worker, even under the most trying business situations.
- 11- Making an extra effort to understand the problems faced by my permanent co-worker.
- 12- Always going out of the way to make newer employees feel welcome in the work group.
- 13- Trying to cheer up my permanent co-worker who is having a bad day.
- 14- Complimenting my permanent co-worker when he/she succeeds at work.
- 15- Taking on extra responsibilities in order to help my permanent co-worker when things get demanding at work.
- 16- Helping my permanent co-worker with difficult assignments, even when assistance is not directly requested.
- 17- Assisting my permanent co-worker with heavy workloads even though it is not part of job.
- 18- Helping my permanent co-worker who is running behind in his/her work activities.
- 19- Helping my permanent co-worker with work when he/she has been absent.
- 20- Going out of way to help my permanent co-worker with work related problems.

*Note.* In the questionnaire, antisocial work behavior items were mixed-up with the ICB items.



Please check: Did you answer all questions?

Thank you for your participation in this survey

Now you've seen and filled out the questionnaire, are you still happy to allow me to use your data? If so, please hand it back to the researcher.

Please be assured that the responses that you provided will be confidential and will only be used for research purposes.

### Appendix 3.3: Arabic translation of items for each scale in the questionnaire.

#### Trust Propensity

- 1- أعتقد (أؤمن) أن الآخرين لديهم نوايا طيبة
- 2- أثق بما يقوله الناس
- 3- أنا حذر(ة) من الآخرين
- 4- أعتقد (أرى) أن كل شيء سيكون على ما يرام
- 5- أعتقد أن الناس هم أساساً (بطبيعتهم) أشرار
- 6- أعتقد أن الناس هم أساساً أخلاقيين (يتمتعون بالأخلاق)
- 7- أشتبّه بوجود دوافع خفيه عند الآخرين
- 8- أؤمن (أعتقد) بوجود الخير في البشرية

#### Trust Climate

- 1- أعتقد أن معظم الناس العاملين في هذه المنظمة لديهم نوايا طيبة
- 2- لدي إيمان/ثقة في وعود أو تصريحات زملاء العمل (co-workers) في المنظمة
- 3- لدي إيمان/ثقة في وعود أو تصريحات المشرفين (رؤساء الأقسام) في المنظمة
- 4- لدي إيمان/ثقة في وعود أو تصريحات مدراء الفروع (الإدارة الوسطى) في المنظمة
- 5- لدي إيمان/ثقة في وعود أو تصريحات كبار المدراء (الإدارة العليا، المدير العام) في المنظمة

#### Trust

##### ما مدى استعدادك لـ

- 1- الاعتماد على أحكام (آراء) زميلك ذات الصلة بالعمل؟
- 2- الاعتماد على مهارات وقدرات زميلك ذات الصلة بالوظيفة؟
- 3- الاعتماد على زميلك للتعامل مع قضية (مسألة) هامة بالنيابة عنك؟
- 4- الاعتماد على زميلك لتمثيل (عرض) عملك بدقه على الآخرين؟
- 5- الاعتماد على زميلك لمساندتك و دعمك في الظروف الصعبة؟
- 6- مشاركة مشاعرك الشخصية مع زميلك ( إطلاع عليه)؟
- 7- تُسر (تبوح) الى زميلك بالمسائل (الأمور) الشخصية التي تؤثر في عملك؟
- 8- مناقشة مشاعرك تجاه عملك بصراحة، حتى المشاعر السلبية والإحباط الذي تشعر به؟
- 9- مناقشة المشاكل والصعوبات المتعلقة بالعمل مع زميلك والتي من الممكن أن يتم استخدامها لإيذائك (للإضرار بمصالحك)؟
- 10- مشاركة معتقداتك الشخصية مع زميلك ( إطلاع عليه)؟

## Trustworthiness

- 1- قادر(ة) جداً على أداء وظيفته/وظيفتها
- 2- معروف عنه أنه ينجح في الأمور التي يحاول القيام بها
- 3- لديه الكثير من المعرفة حول العمل الذي يجب إنجازه
- 4- مؤهل(ة) بشكل جيد
- 5- لديه قدرات في تخصص معين والتي يمكنها أن تزيد من أدائنا
- 6- مهتم(ة) للغاية برفاهيتي (مصلحتي)
- 7- لن يقوم (وهو يعلم) بأي شيء لإيذائي (إلحاق الألم بي)
- 8- يعتني بشكل حقيقي بما هو مهم بالنسبة لي
- 9- سيتحمل المتاعب والمشقة لمساعدتي
- 10- لديه حس قوي بالعدالة
- 11- يحاول جاهداً أن يكون عادلاً في تعاملاته مع الآخرين
- 12- أشعر بالثقة فيما يتعلق بمهارات زميلي
- 13- حاجاتي ورغباتي مهمة جداً لزميلي
- 14- لا أضطر أبداً الى التساؤل إذا ما كان زميلي سيلتزم بكلمته
- 15- أحب (تعجبني) القيم التي يلتزم بها زميلي
- 16- يبدو أن المبادئ السليمة هي التي توجه سلوك زميلي

## Antisocial Work Behaviours

- 1- قول أو فعل شيء لتؤذي (تلحق الألم) بشكل متعمد بزميلك أثناء العمل
- 2- قول أشياء غير لطيفة (فضة) لإلحاق الضرر بشكل متعمد بزميلي أثناء العمل
- 3- القيام بأشياء غير لطيفة (فضة) لإلحاق الضرر بشكل متعمد بزميلي أثناء العمل.
- 4- انتقاد زميلي أثناء العمل
- 5- توجيه كلام سيئ ( فضيع) لزميلي أثناء العمل
- 6- بدء (خلق) جدال مع زميلي أثناء العمل

## Interpersonal Citizenship Behaviours (person-focused and task-focused ICBs)

- 1- الاستماع الى زميلي عندما يريد أن يبوح بما يجول في صدره
- 2- تخصيص وقت للاستماع الى مشاكل زميلي وما يقلقه
- 3- الاهتمام شخصياً بزميلي
- 4- إظهار الاهتمام والمجاملة (اللباقة) تجاه زميلي، حتى في ظل أوضاع العمل الأكثر صعوبة
- 5- بذل جهد إضافي لفهم المشاكل التي يواجهها زميلي
- 6- تحمل المتاعب (المشقة) لجعل زميلي يشعر بأنه موضع ترحيب في المنظمة والمجموعة
- 7- محاولة رفع معنويات (إبهاج) زميلي عندما يواجه يوماً سيئاً

- 8- الإشادة والثناء على زميلي عندما يحقق النجاح في عمله (وظيفته)
- 9- تحمل مسؤوليات إضافية من أجل مساعدة زميلي عندما تزيد متطلبات (ضغط) العمل في المنظمة
- 10- مساعدة زميلي بالمهام الصعبة حتى عندما لا تطلب هذه المساعدة بشكل مباشر
- 11- مساعدة زميلي في القيام بأعباء عمله الثقيلة على الرغم من أن ذلك ليس جزءاً من وظيفتي
- 12- مساعدة زميلي عندما يكون متأخراً عن الآخرين في إنجاز مهامه الوظيفية
- 13- مساعدة زميلي في أعماله الوظيفية بعد أن كان غائباً عن العمل
- 14- تحمل المشقة في سبيل مساعدة زميلي مع المشاكل المتعلقة بالعمل

## APPENDIX 4

**Appendix 4.1:** Results of the Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity for the three samples (n=154, 46, 200).

| #  | Scale Title   | Samples        |                |                |      |                |      |
|----|---|----------------|----------------|----------------|------|----------------|------|
|    |   | 1 <sup>a</sup> |                | 2 <sup>b</sup> |      | 3 <sup>c</sup> |      |
|    |   | K <sup>d</sup> | B <sup>e</sup> | K              | B    | K              | B    |
| 1  | Propensity to trust (8 items)                           | .761           | .000           | .673           | .000 | .744           | .000 |
| 2  | Trust climate   | .865           | .000           | .611           | .000 | .834           | .000 |
| 3  | Ability of contingent co-worker                         | .882           | .000           | .872           | .000 | .883           | .000 |
| 4  | Benevolence of contingent co-worker                     | .849           | .000           | .810           | .000 | .866           | .000 |
| 5  | Integrity of contingent co-worker                       | .836           | .000           | .813           | .000 | .834           | .000 |
| 6  | Trust in contingent co-worker                           | .910           | .000           | .837           | .000 | .913           | .000 |
| 7  | Antisocial work behaviours towards contingent co-worker | .810           | .000           | .886           | .000 | .857           | .000 |
| 8  | Person-focused ICB towards contingent co-worker         | .909           | .000           | .811           | .000 | .902           | .000 |
| 9  | Task focused ICB towards contingent co-worker           | .898           | .000           | .847           | .000 | .896           | .000 |
| 10 | Ability of permanent co-worker                          | .883           | .000           | .888           | .000 | .897           | .000 |
| 11 | Benevolence of permanent co-worker                      | .850           | .000           | .869           | .000 | .866           | .000 |
| 12 | Integrity of permanent co-worker                        | .848           | .000           | .861           | .000 | .865           | .000 |
| 13 | Trust in permanent co-worker                            | .915           | .000           | .883           | .000 | .916           | .000 |
| 14 | Antisocial work behaviours towards permanent co-worker  | .789           | .000           | .846           | .000 | .826           | .000 |
| 15 | Person-focused ICB towards permanent co-worker          | .896           | .000           | .866           | .000 | .901           | .000 |
| 16 | Task focused ICB towards permanent co-worker            | .875           | .000           | .846           | .000 | .885           | .000 |

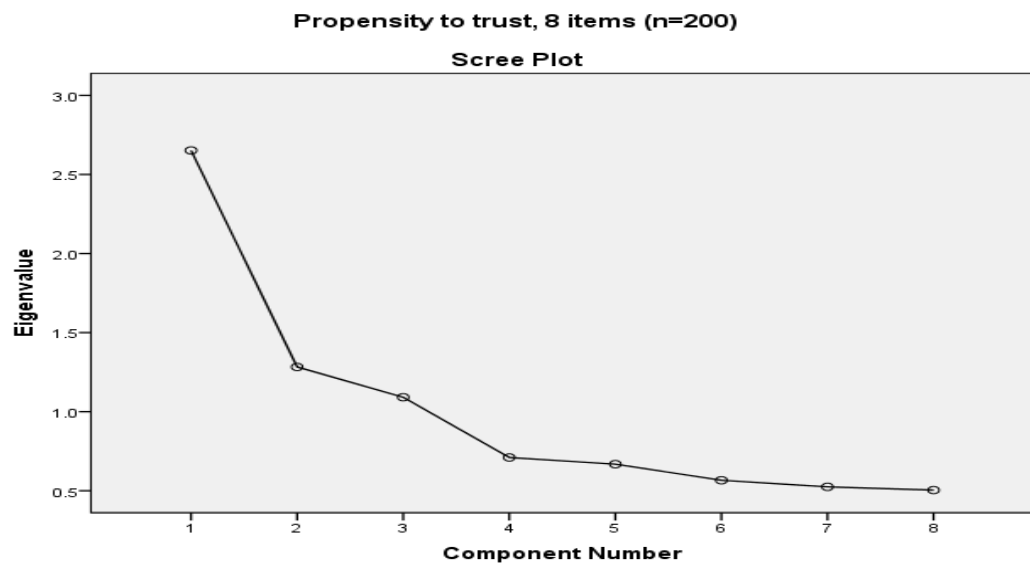
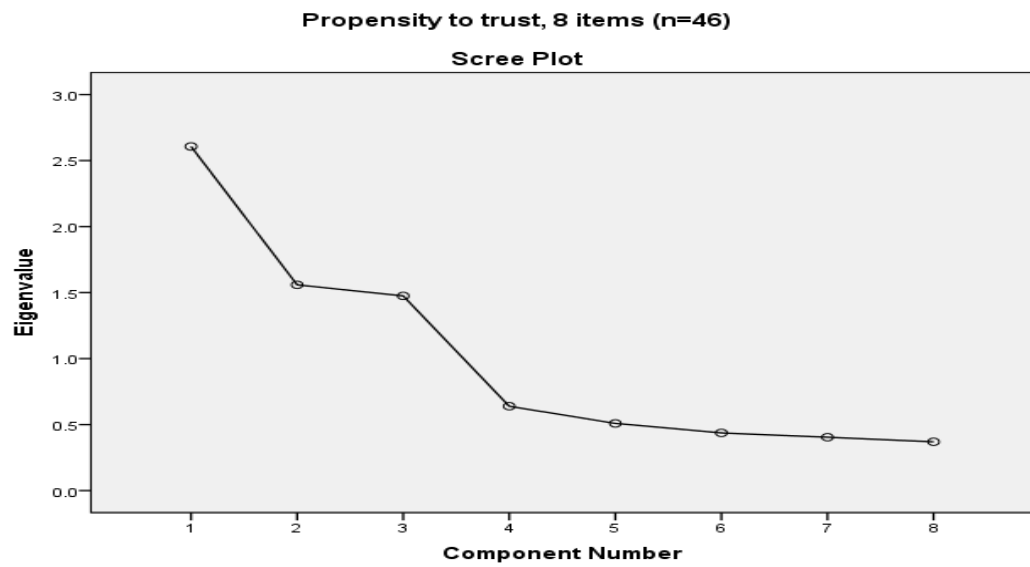
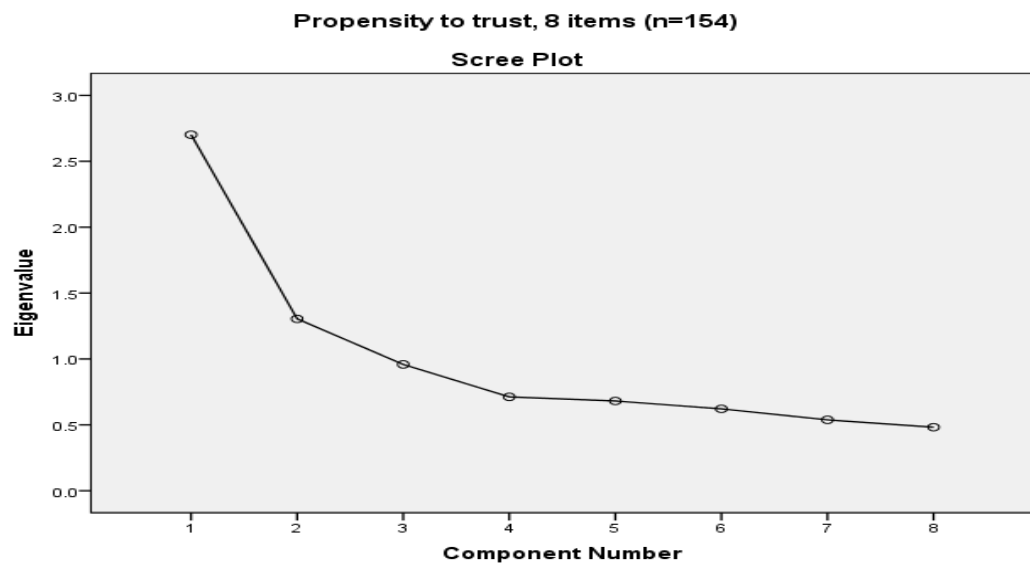
<sup>a</sup>Permanent employee sample (n=154). <sup>b</sup>Contingent employee sample (n=46). <sup>c</sup>Combined employee sample (n=200). <sup>d</sup>Kaiser-Meyer-Olkin (KMO) value. <sup>e</sup>Bartlett's test of sphericity (Sig.).

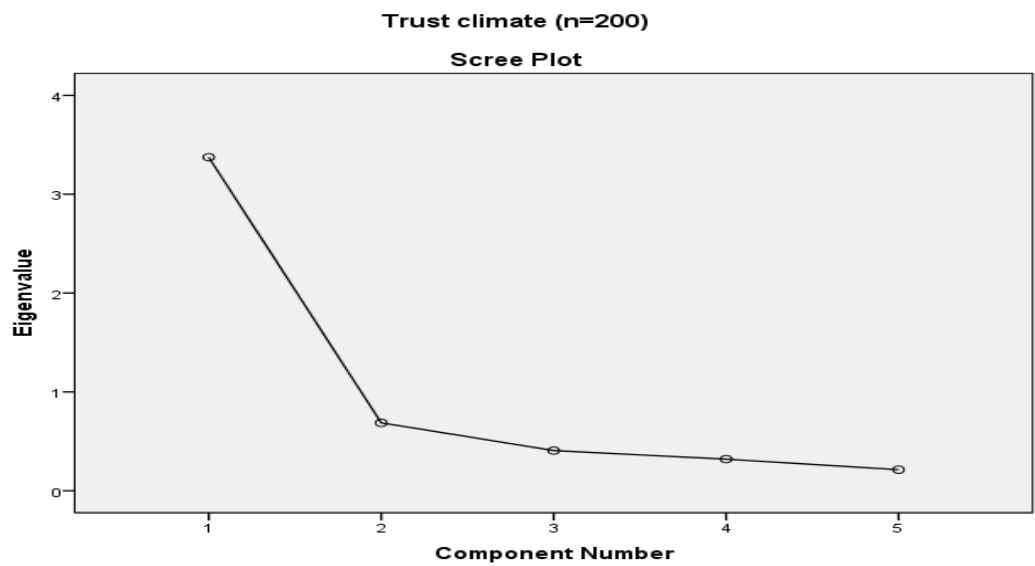
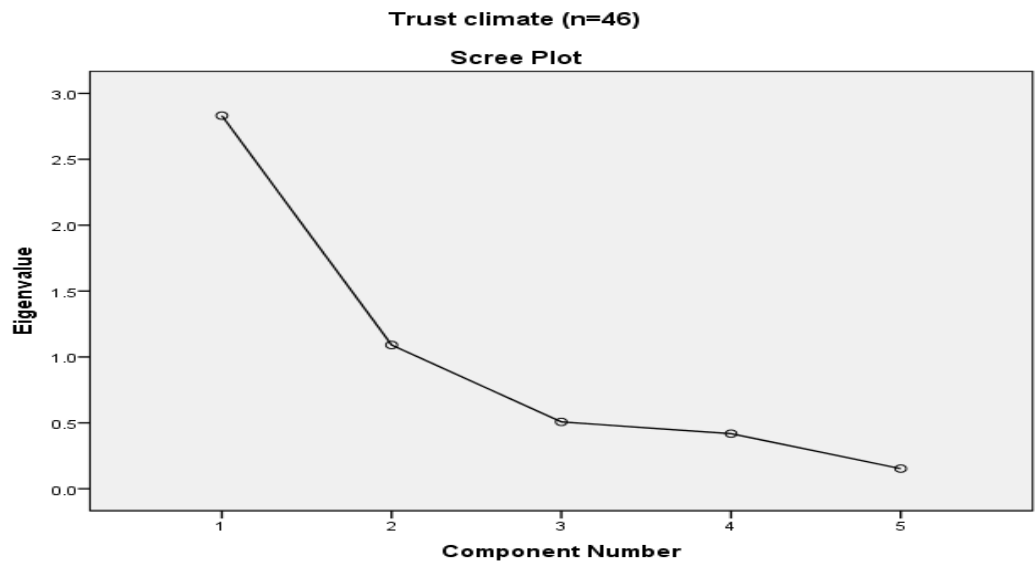
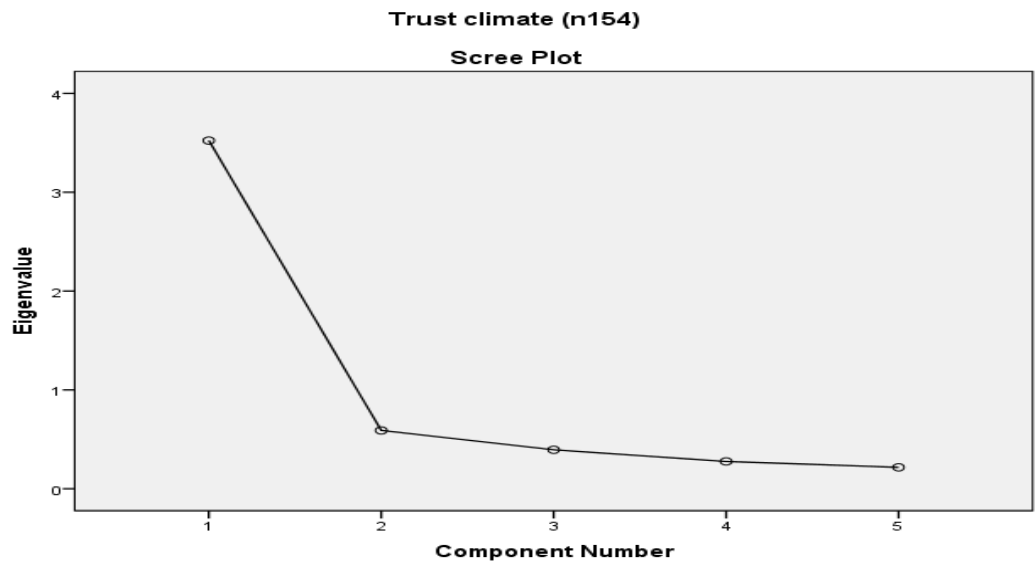
**Appendix 4.2:** Number of components recommended to be retained by each PCA criterion for the three samples (n=154, 46, 200).

| #  | Scale title  | Samples               |                       |                       |                |          |          |                |          |          |
|----|--|-----------------------|-----------------------|-----------------------|----------------|----------|----------|----------------|----------|----------|
|    |  | 1 <sup>a</sup>        |                       |                       | 2 <sup>b</sup> |          |          | 3 <sup>c</sup> |          |          |
|    |  | <i>K</i> <sup>d</sup> | <i>S</i> <sup>e</sup> | <i>C</i> <sup>f</sup> | <i>K</i>       | <i>S</i> | <i>C</i> | <i>K</i>       | <i>S</i> | <i>C</i> |
| 1  | Propensity to trust                                    | 2                     | 2                     | 2                     | 3              | 1&3      | 3        | 3              | 3        | 3        |
| 2  | Trust climate  | 1                     | 1                     | 1                     | 2              | 2        | 2        | 1              | 1        | 1        |
| 3  | Ability of contingent co-worker                        | 1                     | 1                     | 1                     | 1              | 1        | 1        | 1              | 1        | 1        |
| 4  | Benevolence of contingent co-worker                    | 1                     | 1                     | 1                     | 1              | 1        | 1        | 1              | 1        | 1        |
| 5  | Integrity of contingent co-worker                      | 1                     | 1                     | 1                     | 1              | 1        | 1        | 1              | 1        | 1        |
| 6  | Trust in contingent co-worker                          | 2                     | 2                     | 2                     | 2              | 2        | 2        | 2              | 2        | 2        |
| 7  | Antisocial work behaviour towards contingent co-worker | 1                     | 1                     | 1                     | 1              | 1        | 1        | 1              | 1        | 1        |
| 8  | Ability of permanent co-worker                         | 1                     | 1                     | 1                     | 1              | 1        | 1        | 1              | 1        | 1        |
| 9  | Benevolence of permanent co-worker                     | 1                     | 1                     | 1                     | 1              | 1        | 1        | 1              | 1        | 1        |
| 10 | Integrity of permanent co-worker                       | 1                     | 1                     | 1                     | 1              | 1        | 1        | 1              | 1        | 1        |
| 11 | Trust in permanent co-worker                           | 2                     | 2                     | 2                     | 2              | 2        | 2        | 2              | 2        | 2        |
| 12 | Antisocial work behaviours towards permanent co-worker | 1                     | 1                     | 1                     | 1              | 1        | 1        | 1              | 1        | 1        |
| 13 | Person focused ICB towards contingent co-worker        | 1                     | 1                     | 1                     | 2              | 2        | 2        | 1              | 1        | 1        |
| 14 | Task focused ICB towards contingent co-worker          | 1                     | 1                     | 1                     | 1              | 1        | 1        | 1              | 1        | 1        |
| 15 | Person focused ICB towards permanent co-worker         | 1                     | 1                     | 1                     | 1              | 1        | 1        | 1              | 1        | 1        |
| 16 | Task focused ICB towards permanent co-worker           | 1                     | 1                     | 1                     | 1              | 1        | 1        | 1              | 1        | 1        |

<sup>a</sup>Permanent employee sample (n=154). <sup>b</sup>Contingent employee sample (n=46). <sup>c</sup>Combined employee sample (n=200). <sup>d</sup>Kaisers criterion. <sup>e</sup>Scree plot. <sup>f</sup>Component matrix.

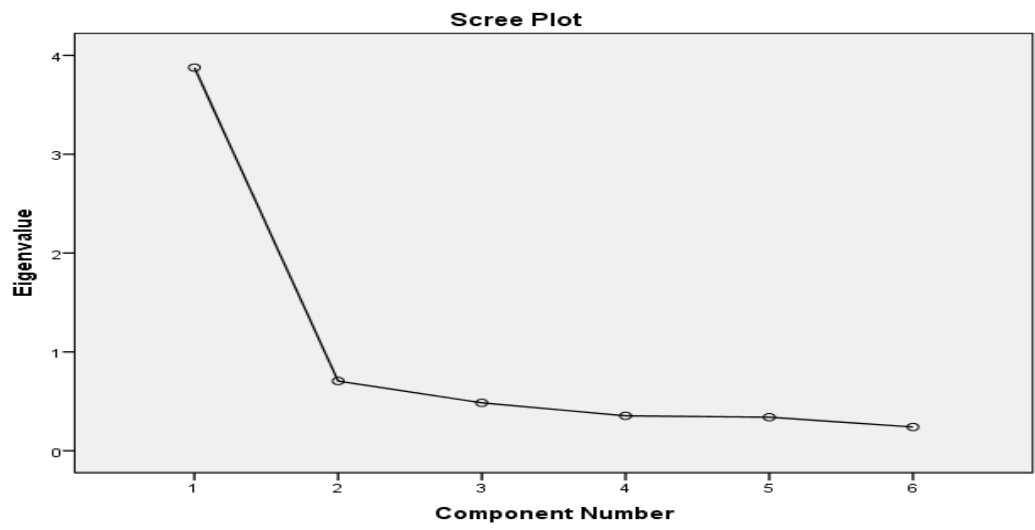
**Appendix 4.3:** Scree plots for each scale in each of the three samples.







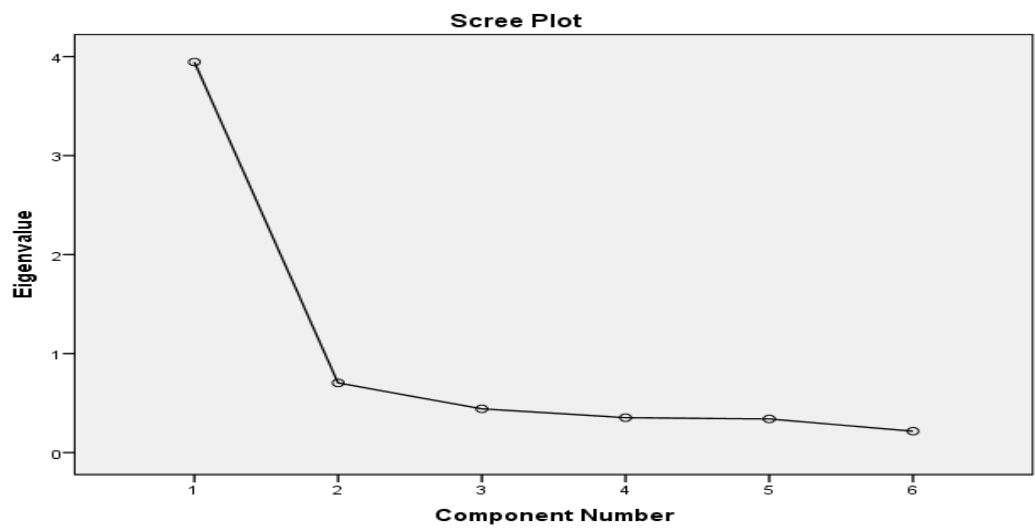
Ability of contingent co-worker (n=154)



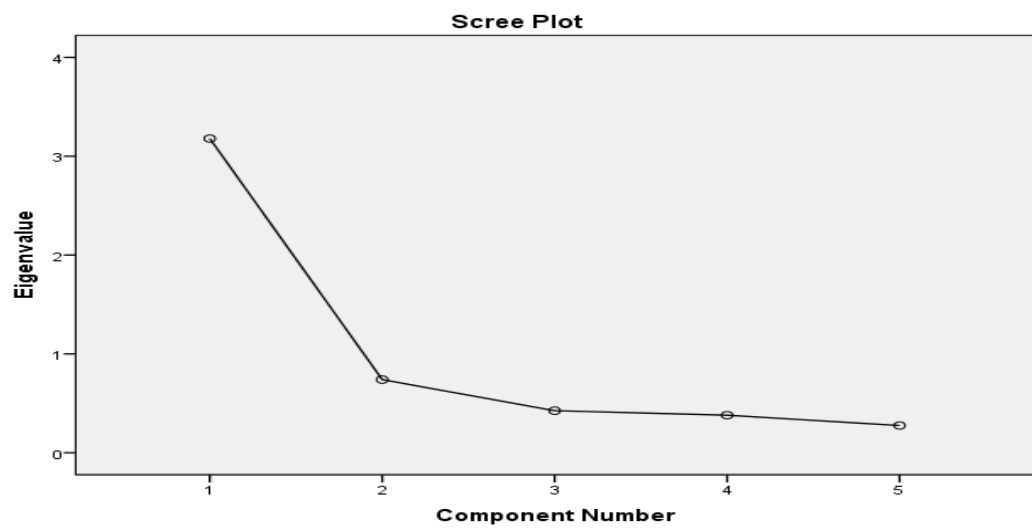
Ability of contingent co-worker (n=46)



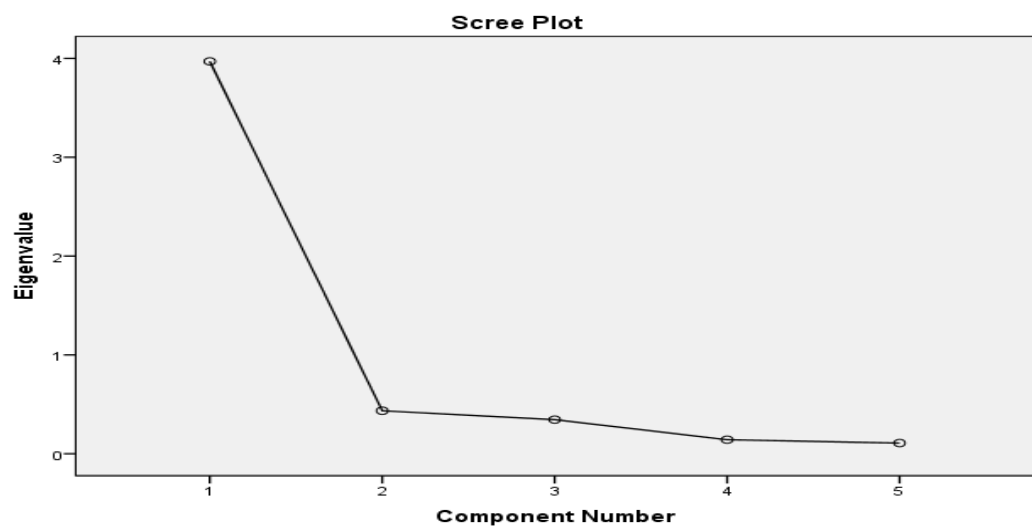
Ability of contingent co-worker (n=200)



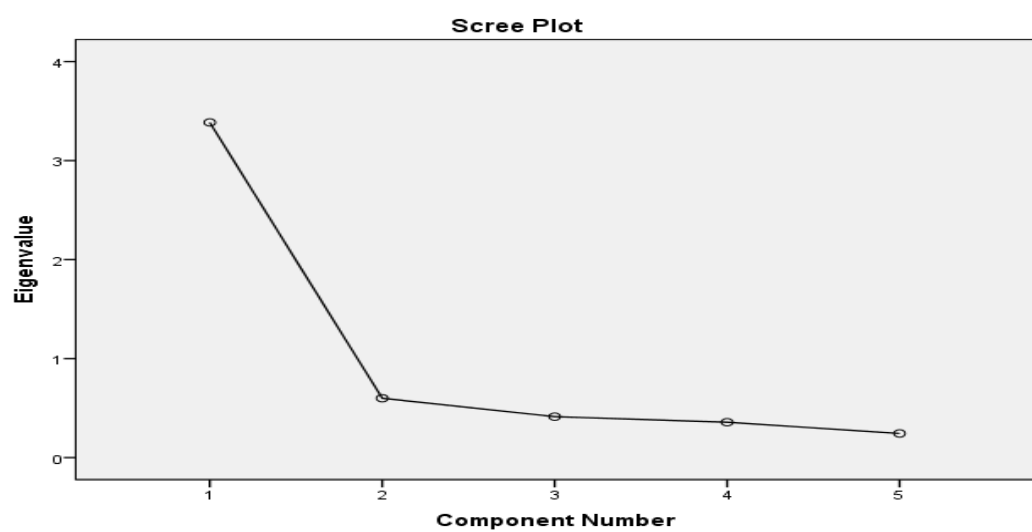
**Benevolence of contingent co-worker (n=154)**



**Benevolence of contingent co-worker (n=46)**



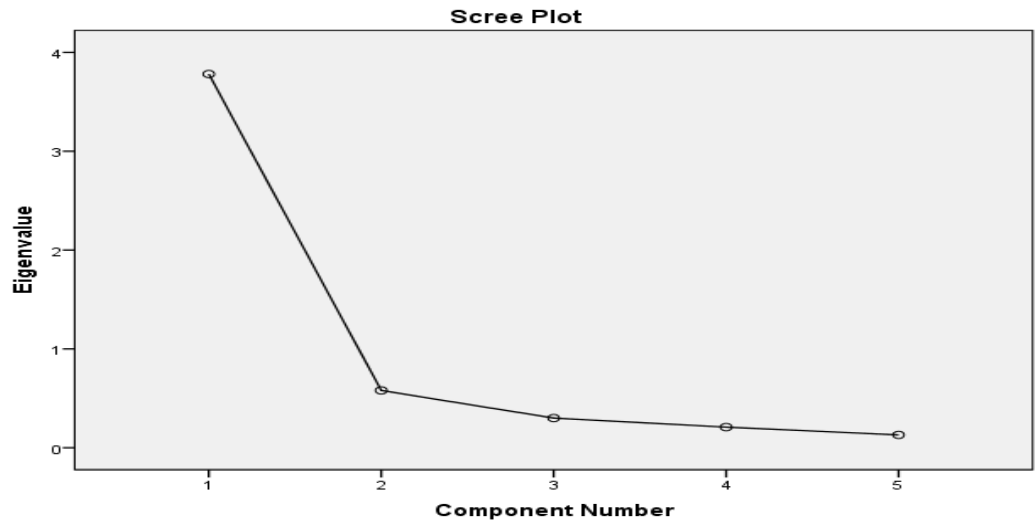
**Benevolence of contingent co-worker (n=200)**



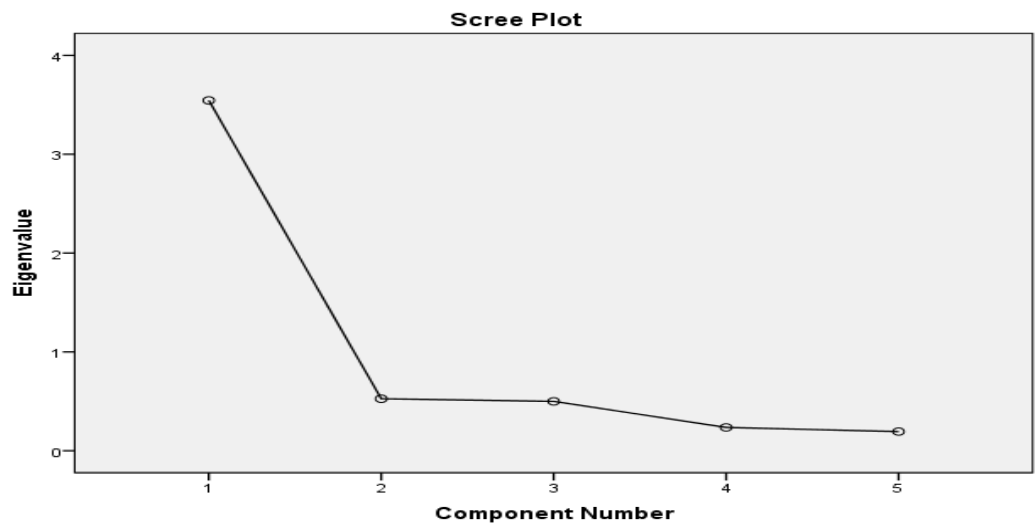
**Integrity of contingent co-worker (n=154)**



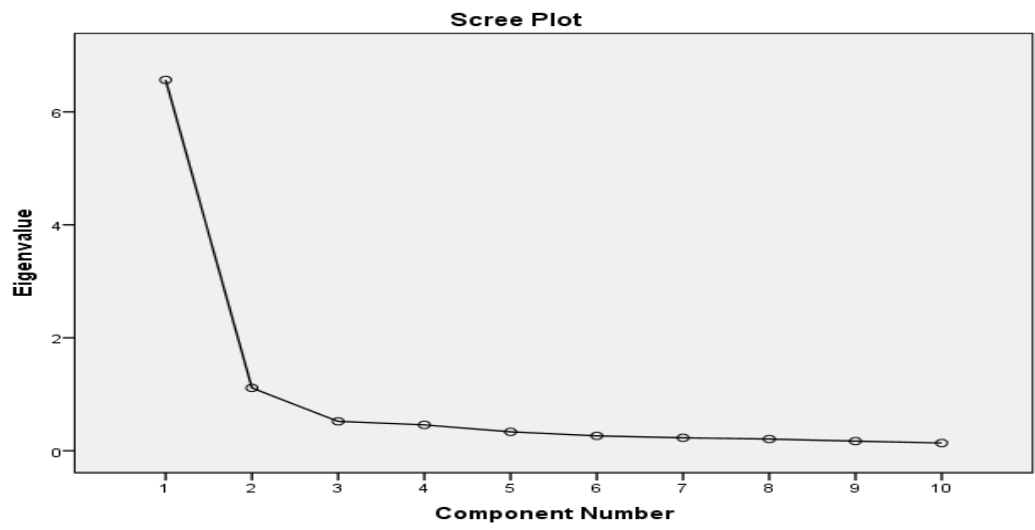
**Integrity of contingent co-worker (n=46)**



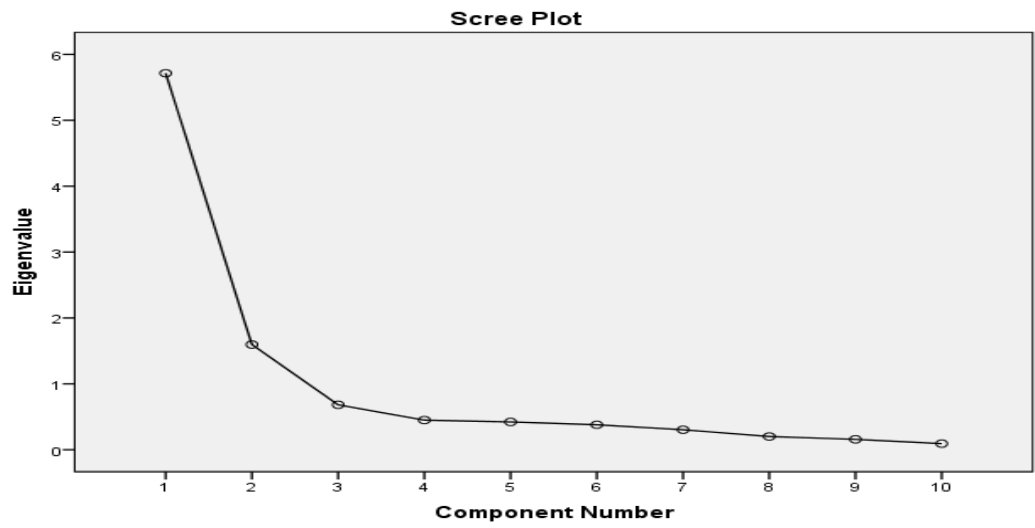
**Integrity of contingent co-worker (n=200)**



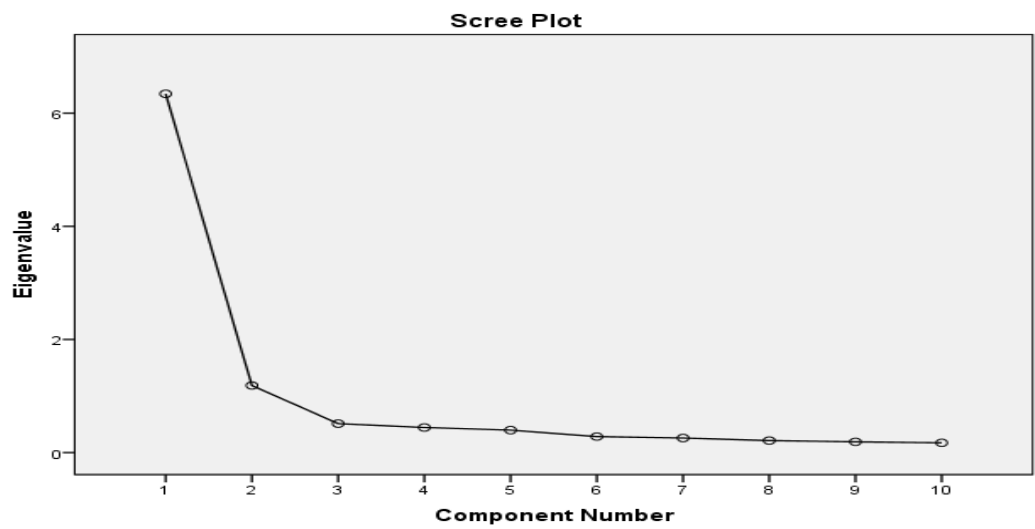
Trust in contingent co-worker (n=154)



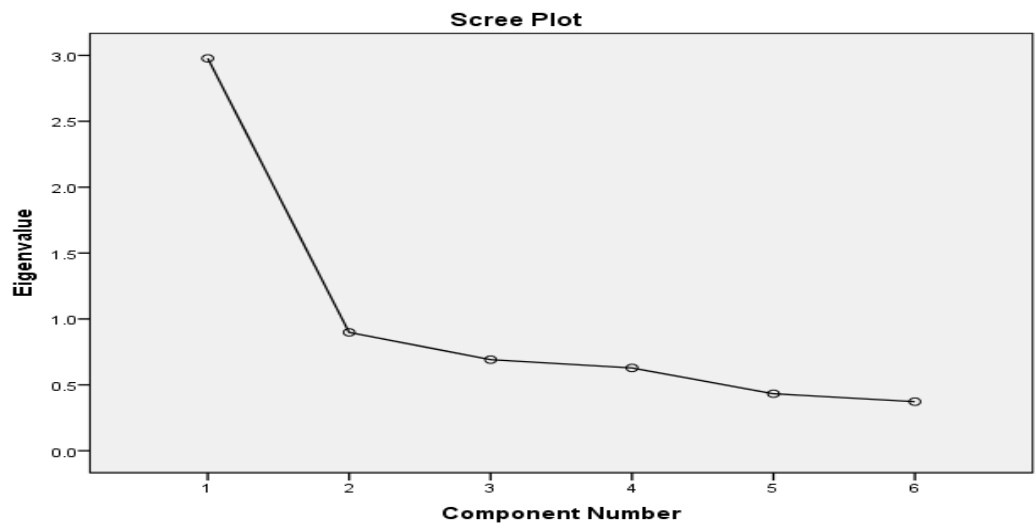
Trust in contingent co-worker (n=46)



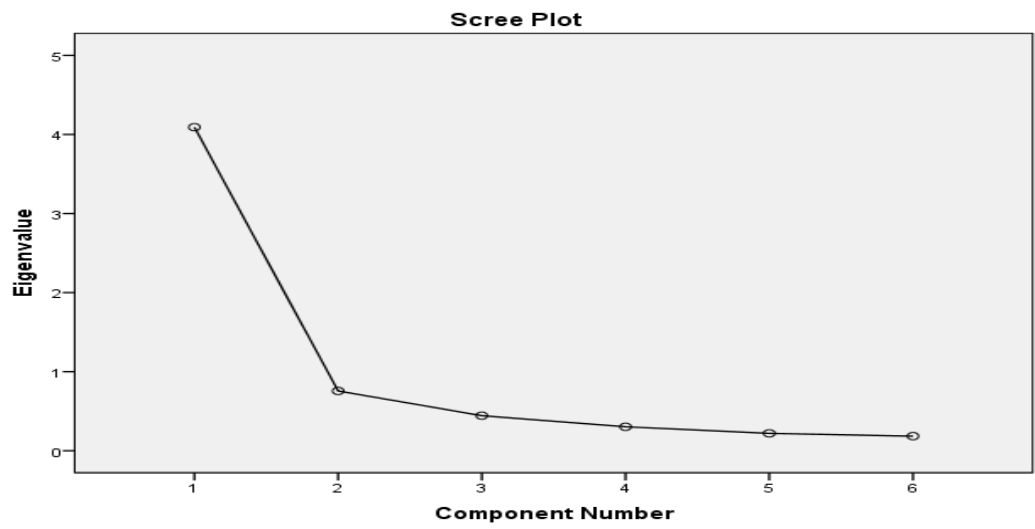
Trust in contingent co-worker (n=200)



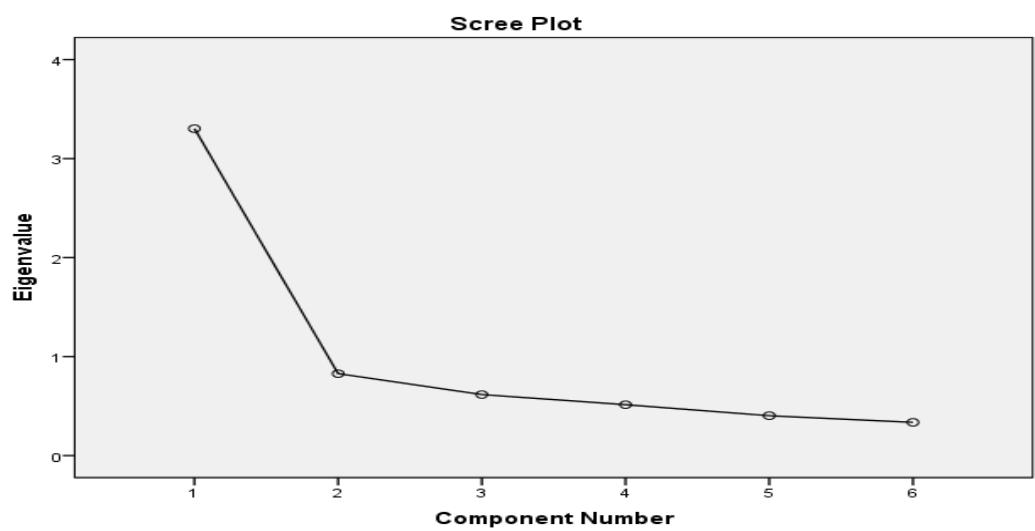
**Antisocial work behaviours towards contingent co-worker (n=154)**



**Antisocial work behaviours towards contingent co-worker (n=46)**



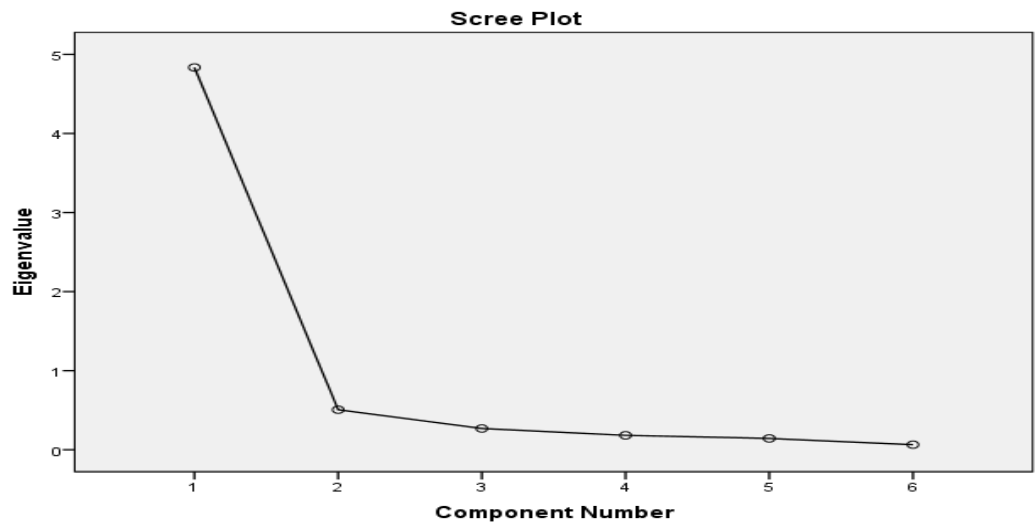
**Antisocial work behaviours towards contingent co-worker (n=200)**



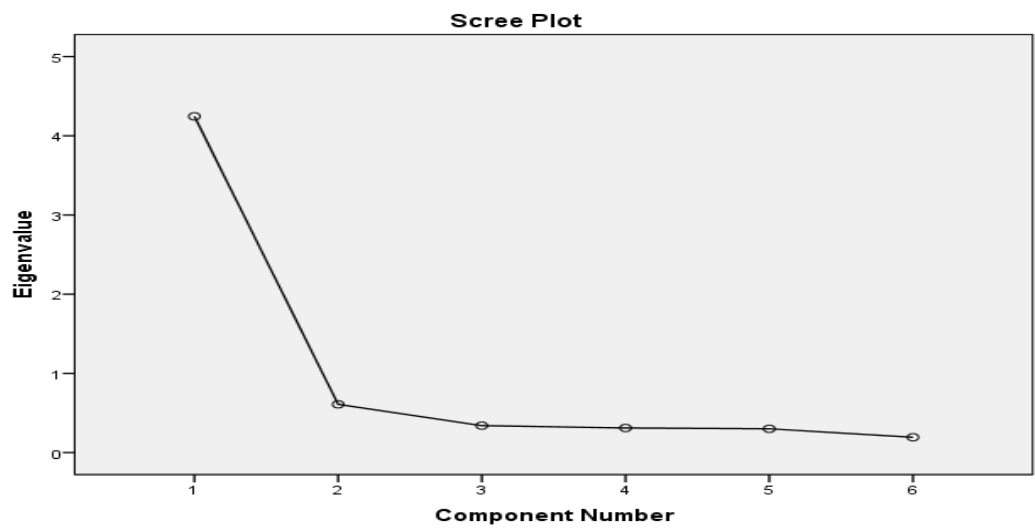
Ability of permanent co-worker (n=154)



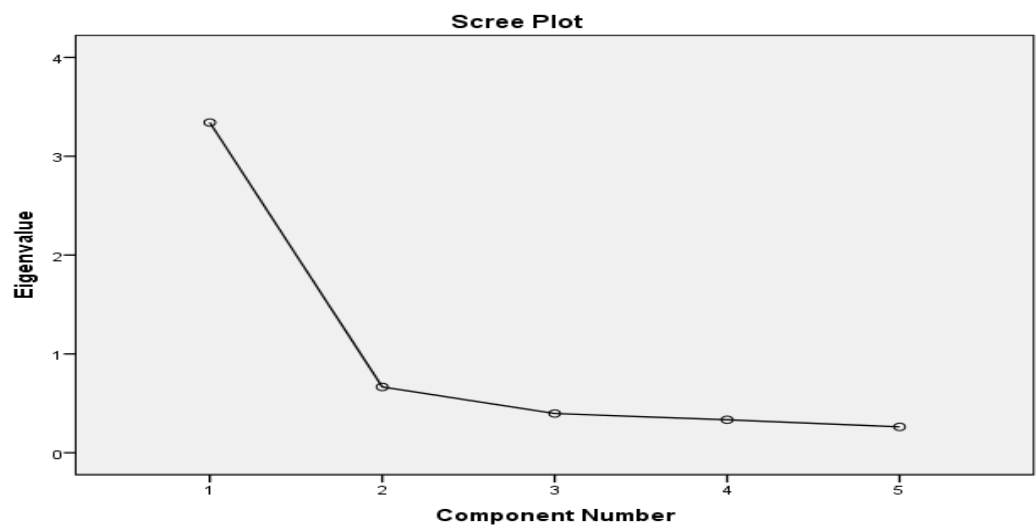
Ability of permanent co-worker (n=46)



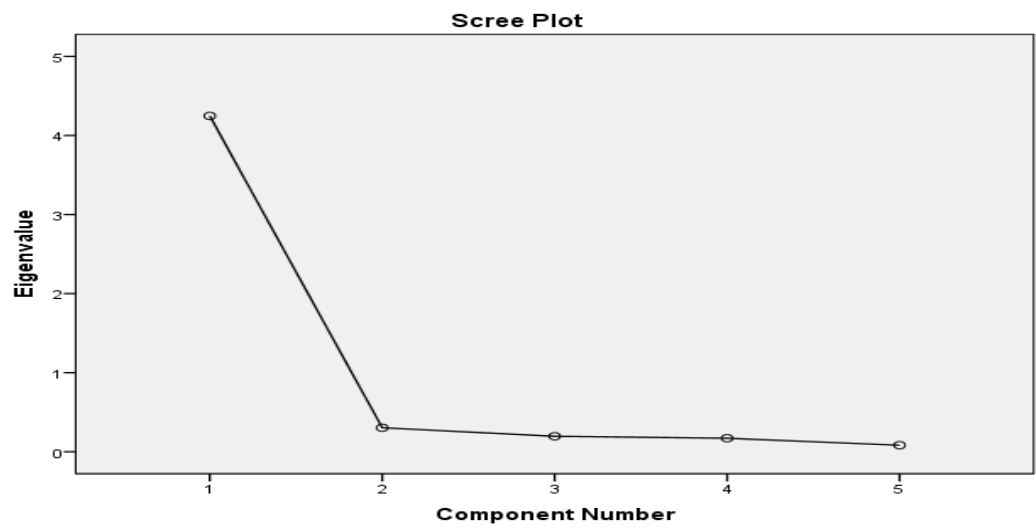
Ability of permanent co-worker (n=200)



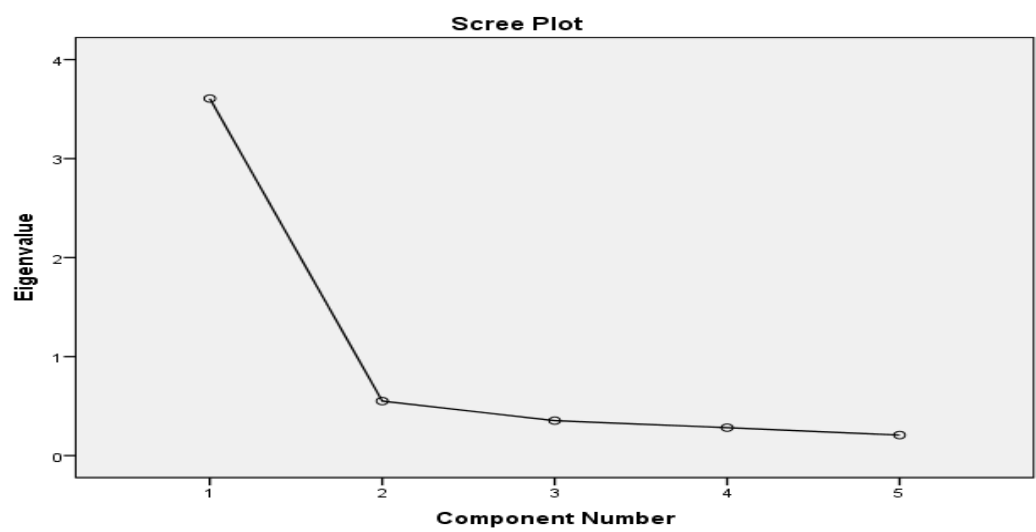
**Benevolence of permanent co-worker (n=154)**



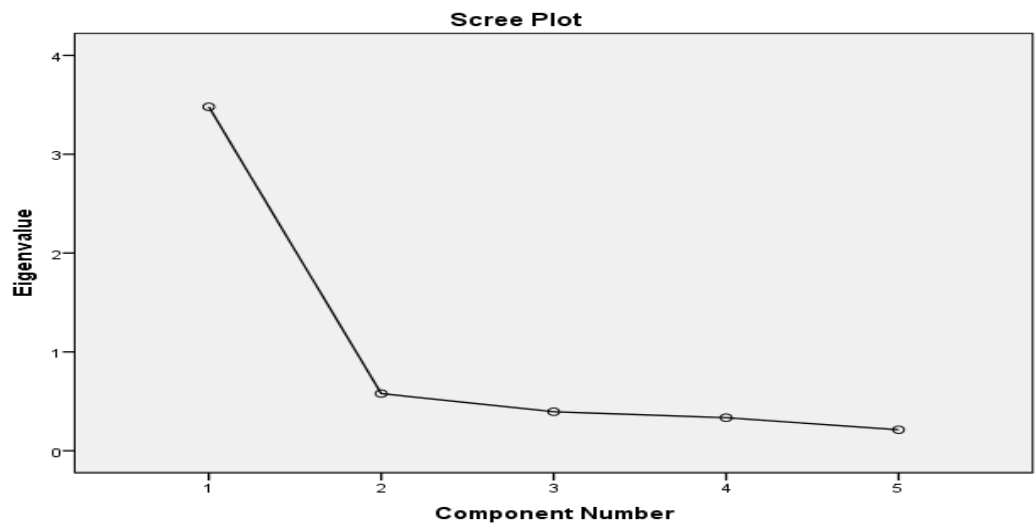
**Benevolence of permanent co-worker (n=46)**



**Benevolence of permanent co-worker (n=200)**



Integrity of permanent co-worker (n=154)



Integrity of permanent co-worker (n=46)

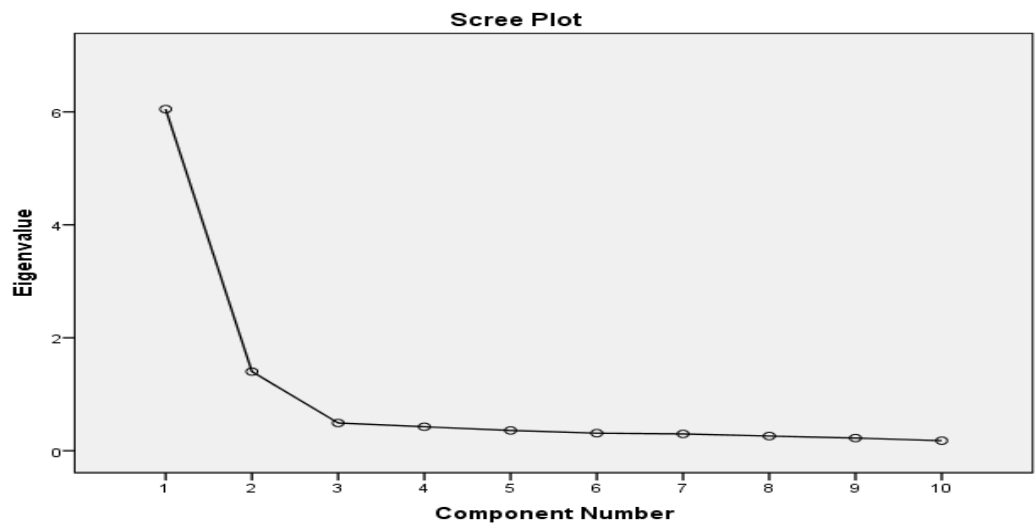


Integrity of permanent co-worker (n=200)

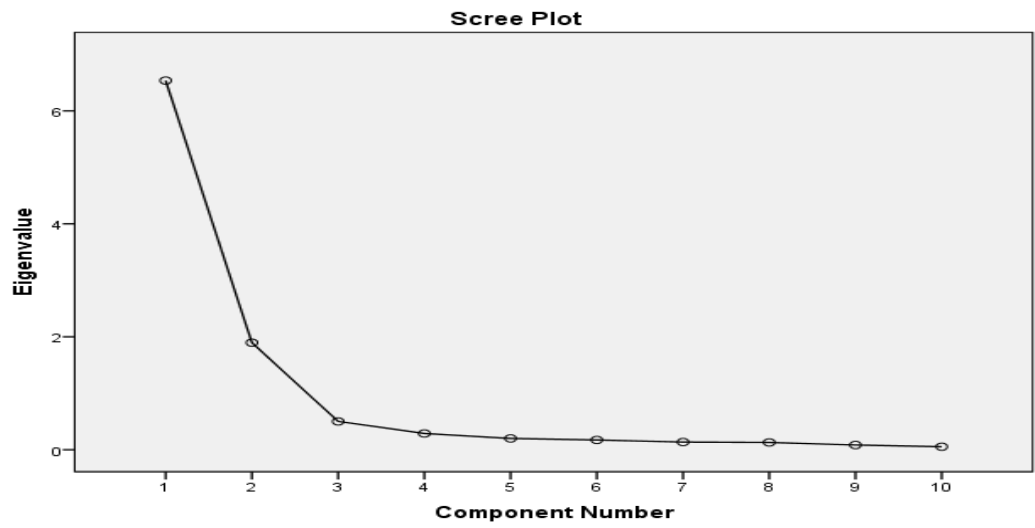




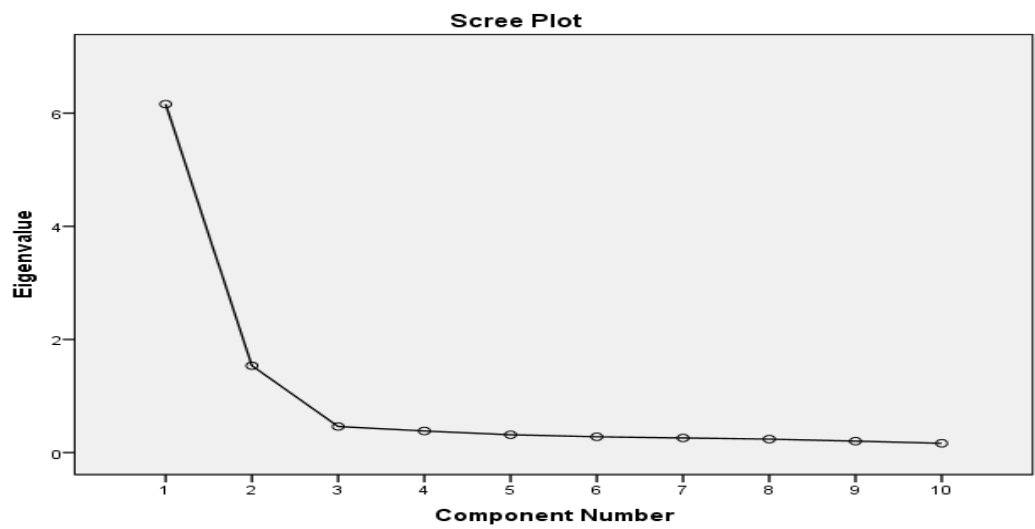
Trust in permanent co-worker (n=154)



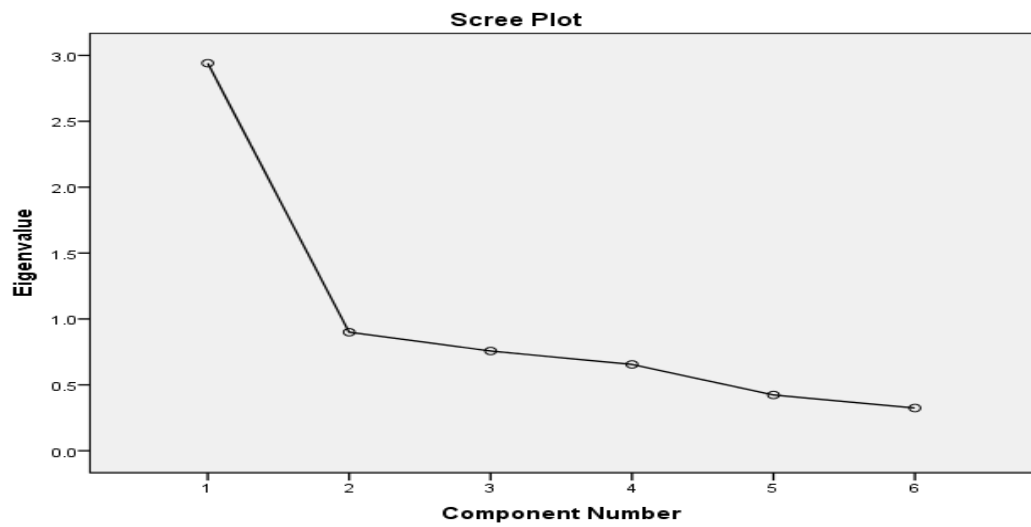
Trust in permanent co-worker (n=46)



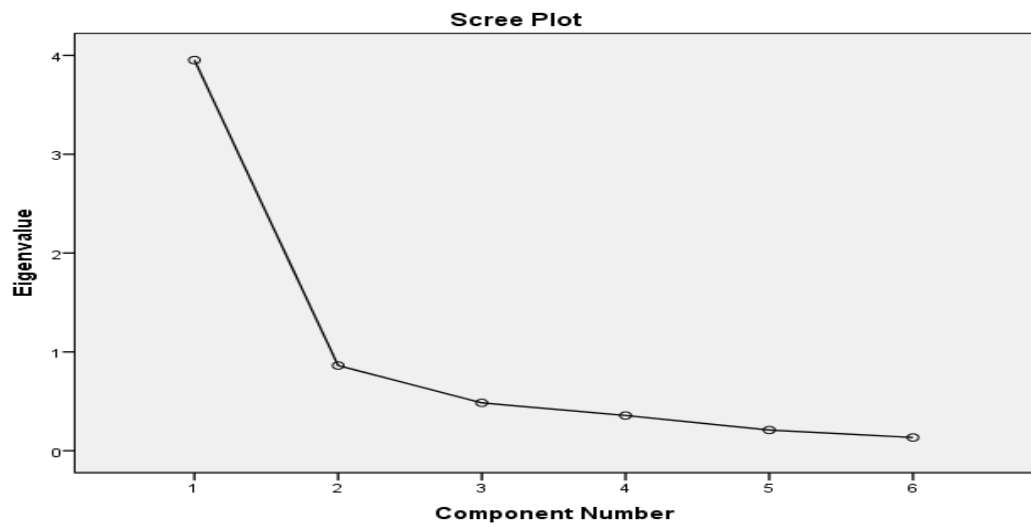
Trust in permanent co-worker (n=200)



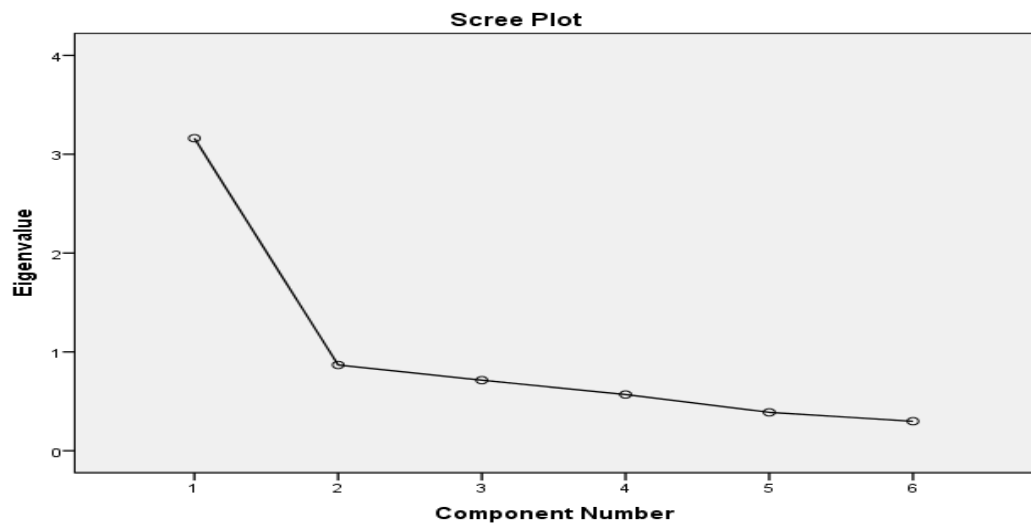
**Antisocial work behaviours towards a permanent co-worker (n=154)**



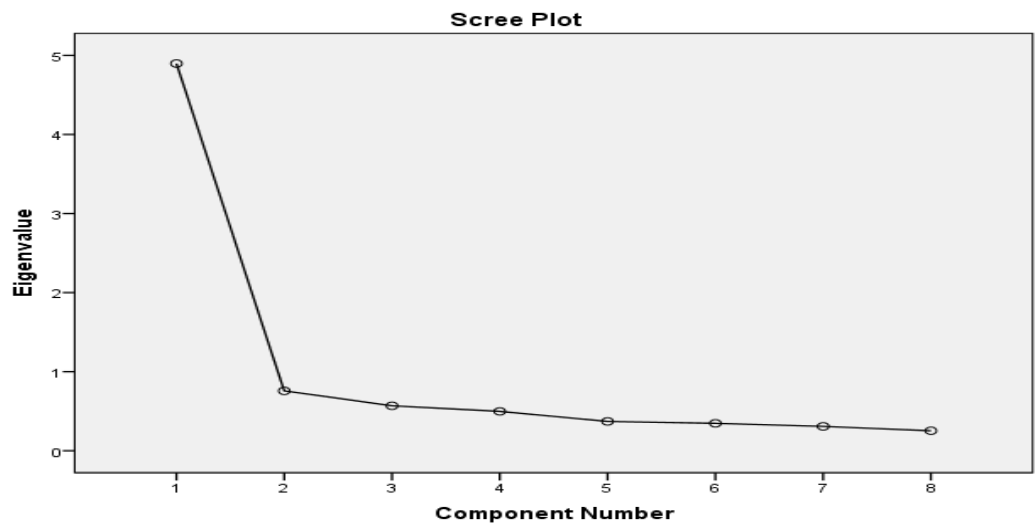
**Antisocial work behaviours towards permanent co-worker (n=46)**



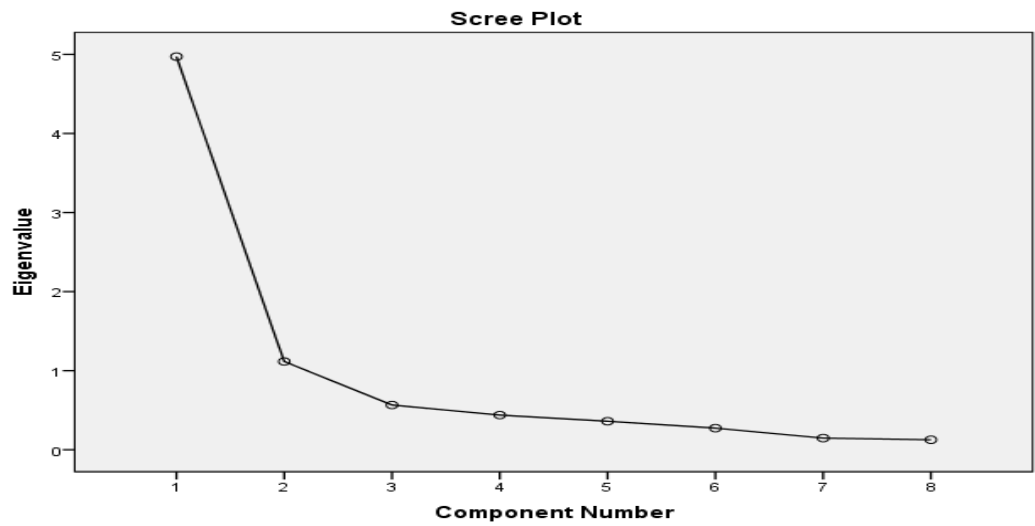
**Antisocial work behaviours towards permanent co-worker (n=200)**



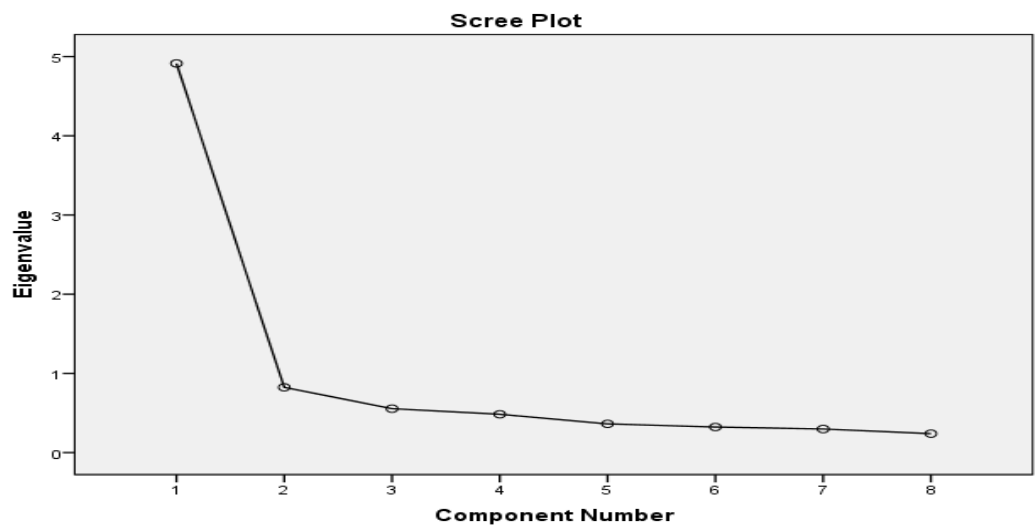
**Person-focused ICB towards contingent co-worker (n=154)**



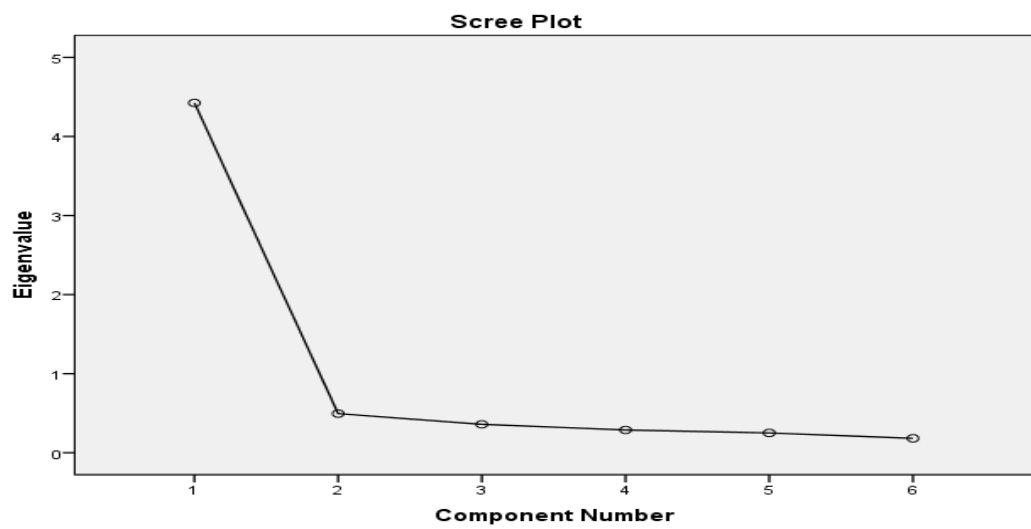
**Person-focused ICB towards contingent co-worker (n=46)**



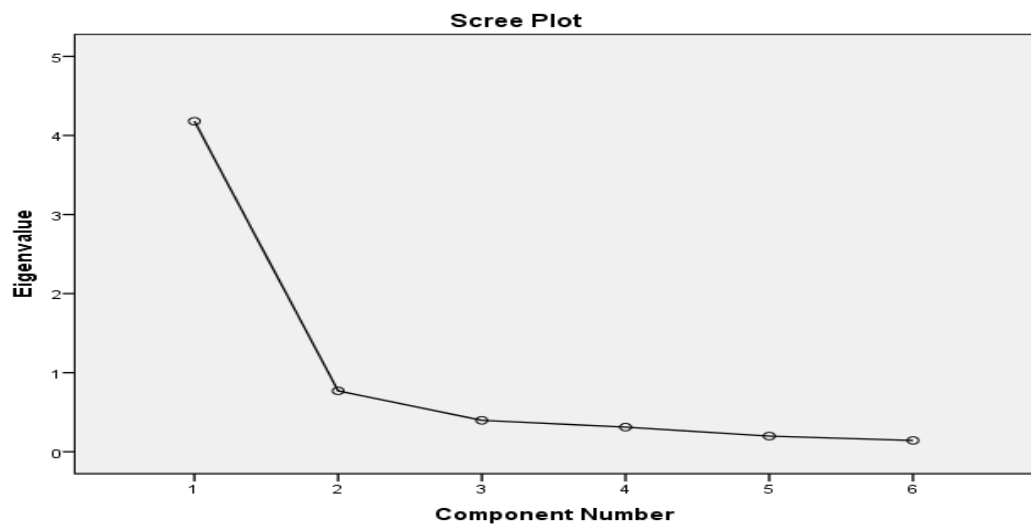
**Person-focused ICB towards contingent co-worker (n=200)**



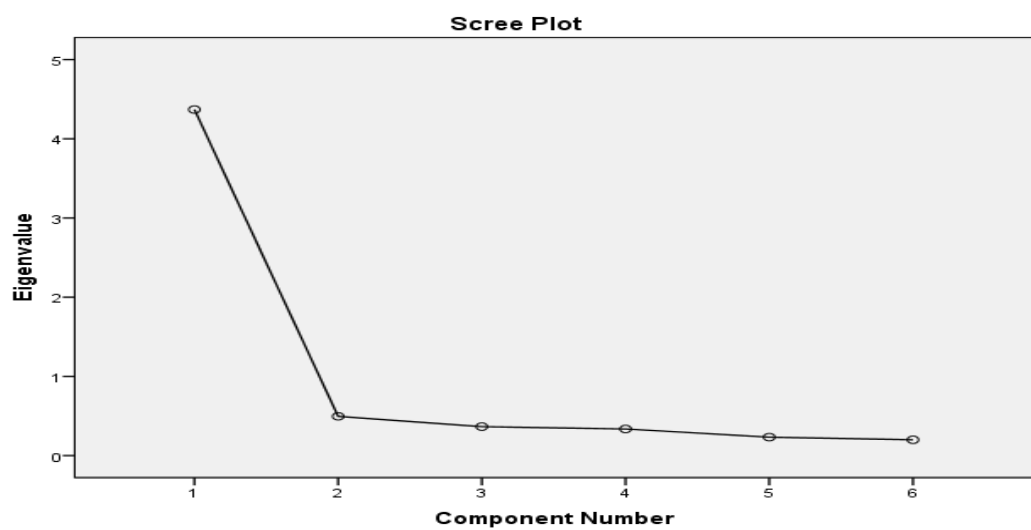
**Task-focused ICB towards contingent co-worker (n=154)**



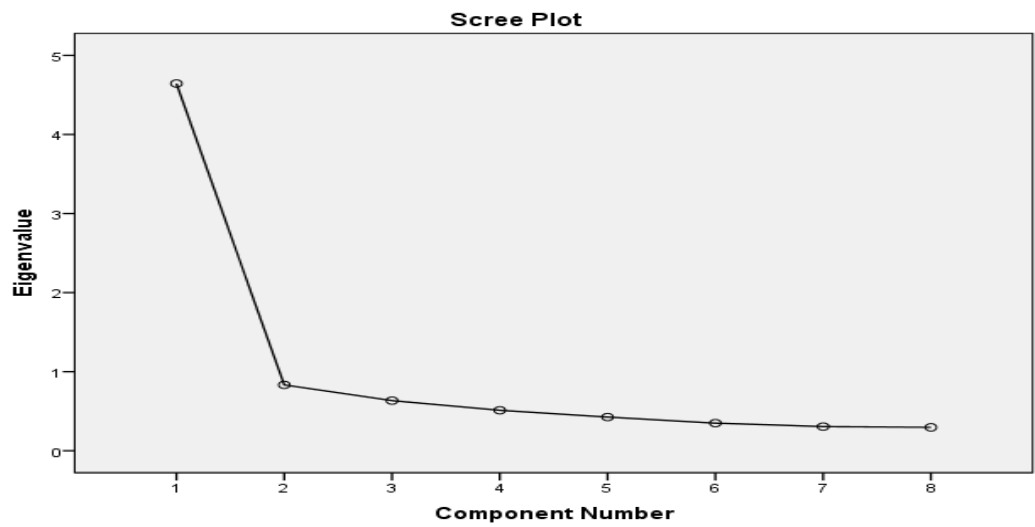
**Task-focused ICB towards contingent co-worker (n=46)**



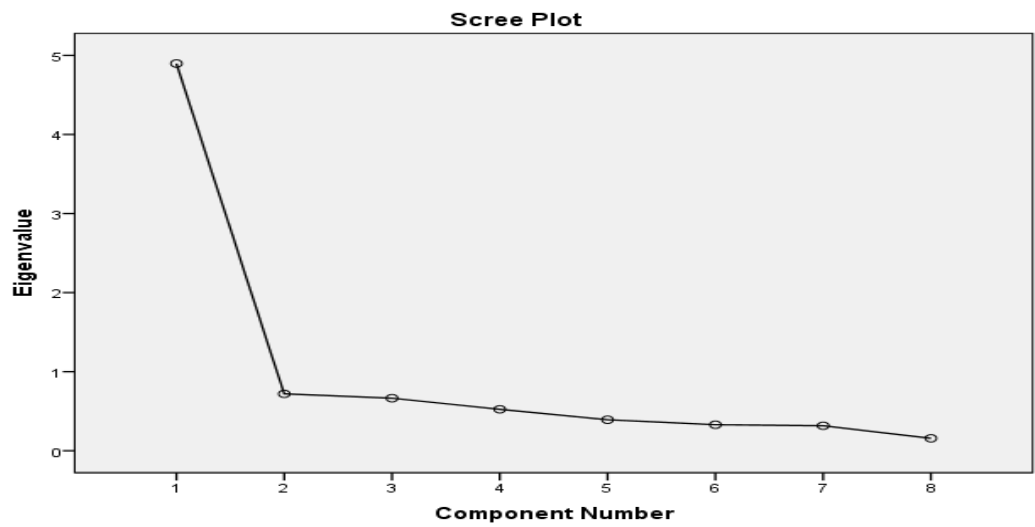
**Task-focused ICB towards contingent co-worker (n=200)**



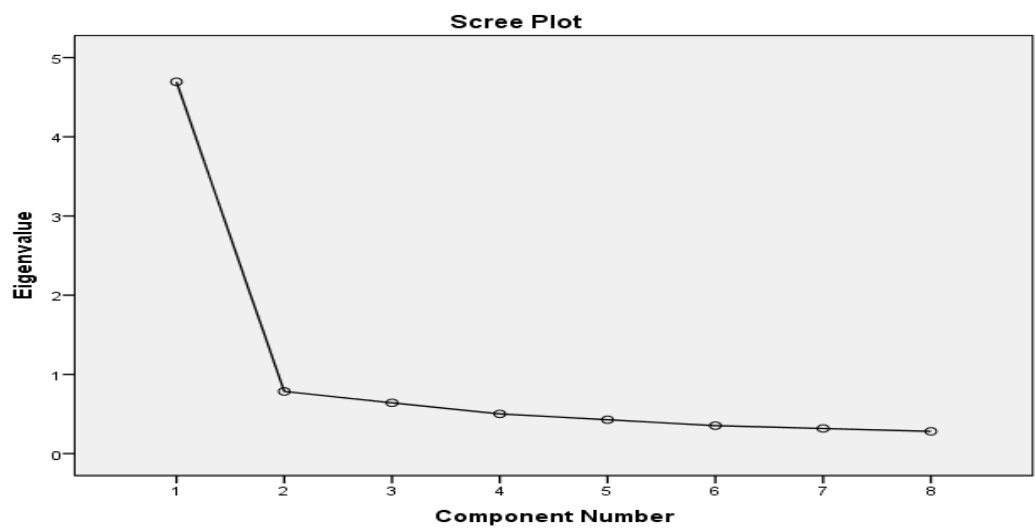
**Person-focused ICB towards permanent co-worker (n=154)**



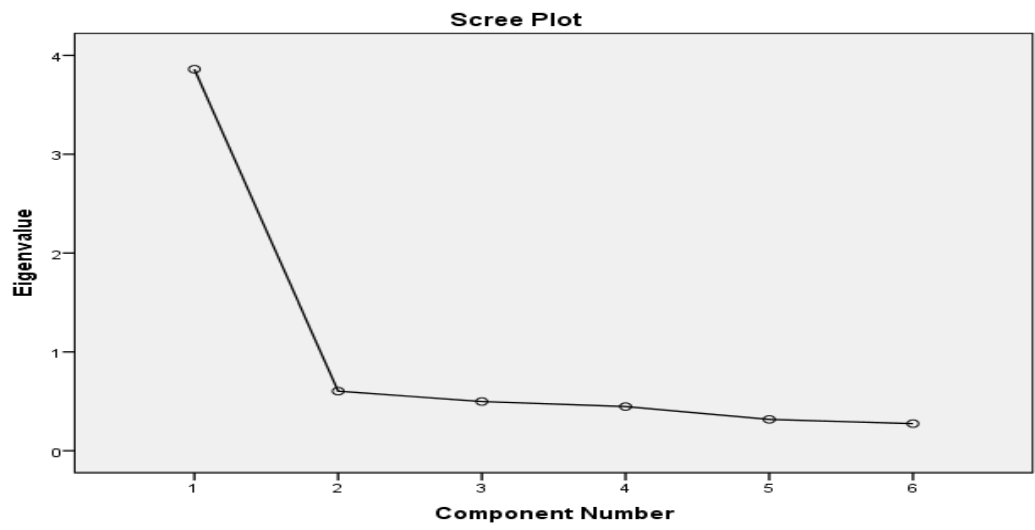
**Person-focused ICB towards permanent co-worker (n=46)**



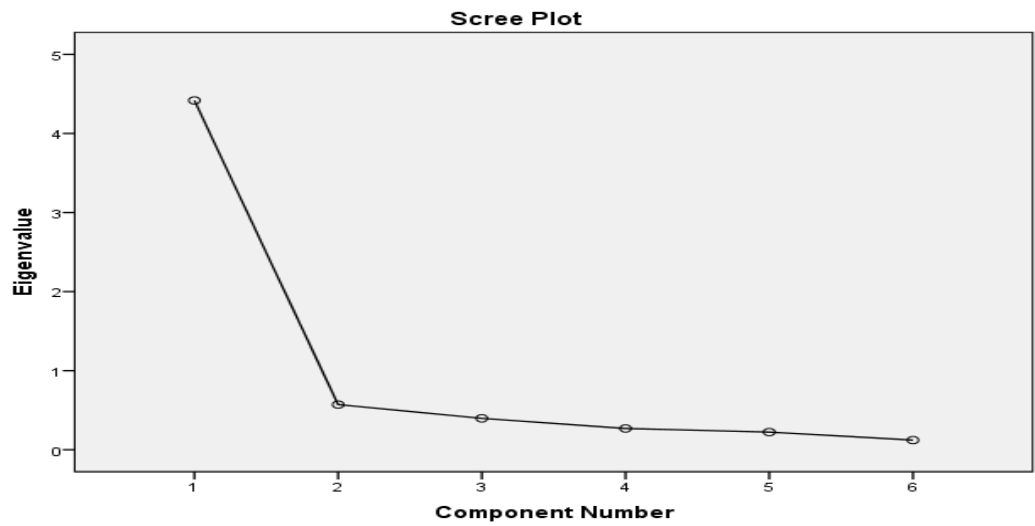
**Person-focused ICB towards permanent co-worker (n=200)**



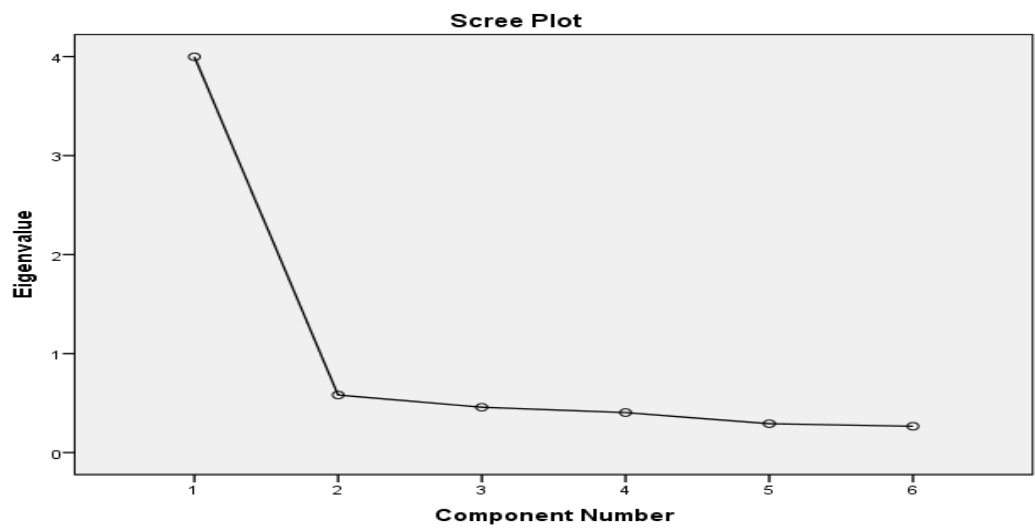
**Task-focused ICB towards permanent co-worker (n=154)**



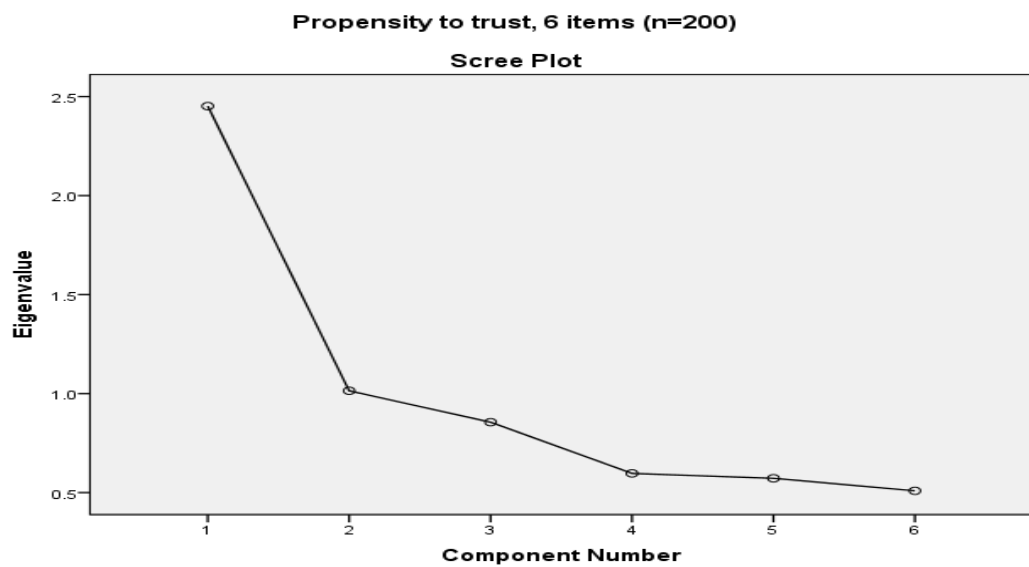
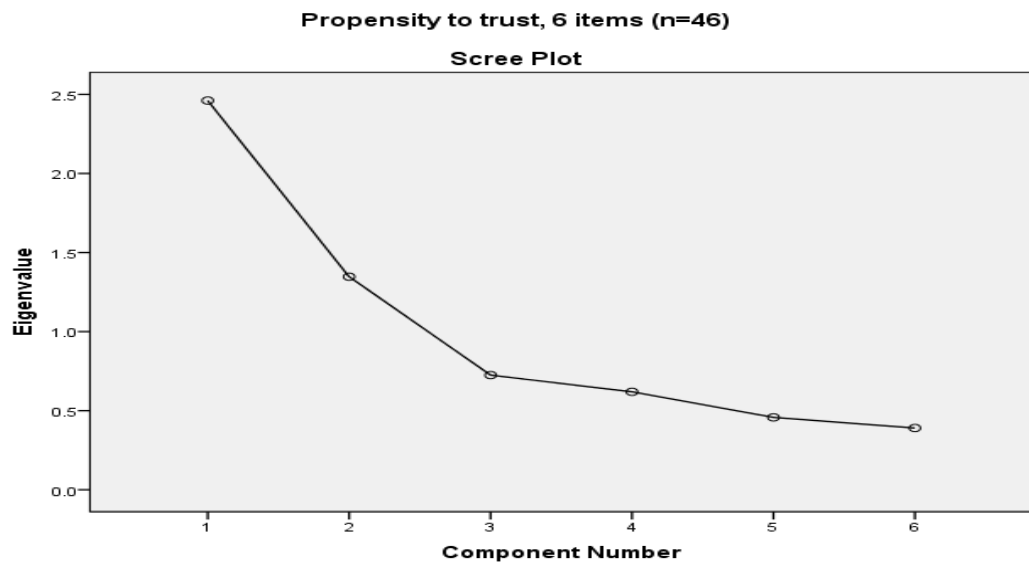
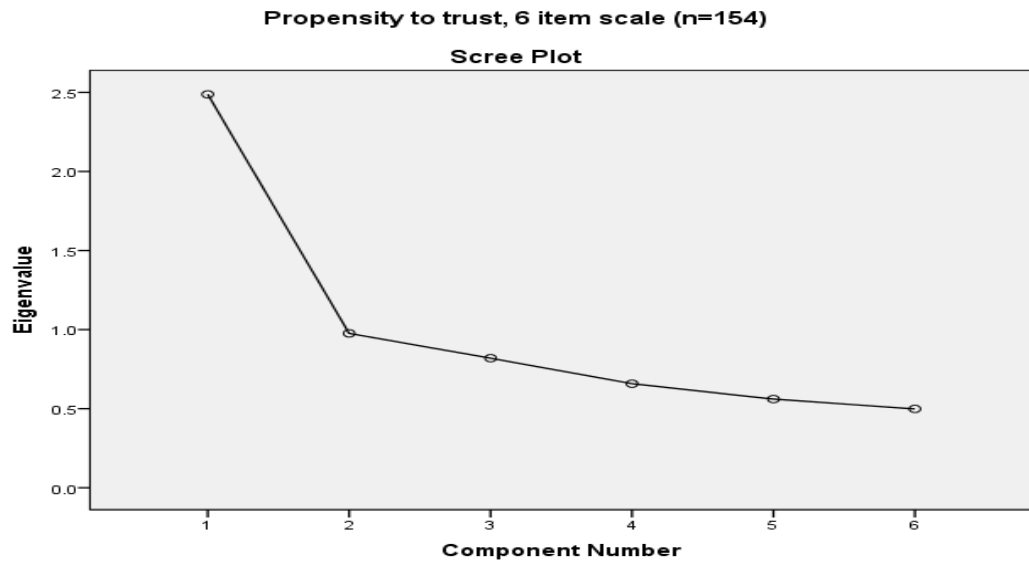
**Task-focused ICB towards permanent co-worker (n=46)**



**Task-focused ICB towards permanent co-worker (n=200)**



**Appendix 4.4:** Scree plots for the propensity to trust scale (6 items).



**Appendix 4.5:** Significance values for the ‘Test of homogeneity of variances’ and the ‘Welch’ and ‘Brown-Forsythe’ F-ratios for each scale in each of the three samples (n=154, 46, 200).

| #  | Scale title  | Sample 1 <sup>a</sup> |                       |                       | Sample 2 <sup>b</sup> |          |          | Sample 3 <sup>c</sup> |          |          |
|----|--|-----------------------|-----------------------|-----------------------|-----------------------|----------|----------|-----------------------|----------|----------|
|    |  | <i>H</i> <sup>d</sup> | <i>W</i> <sup>e</sup> | <i>B</i> <sup>f</sup> | <i>H</i>              | <i>W</i> | <i>B</i> | <i>H</i>              | <i>W</i> | <i>B</i> |
| 1  | Propensity to trust                                    | .523                  | .745                  | .806                  | .284                  | .539     | .480     | .451                  | .492     | .584     |
| 2  | Trust climate  | .916                  | .418                  | .285                  | .993                  | .645     | .501     | .897                  | .117     | .055     |
| 3  | Ability of contingent co-worker                        | .162                  | .004                  | .000                  | .800                  | .809     | .858     | .079                  | .051     | .020     |
| 4  | Benevolence of contingent co-worker                    | .112                  | .039                  | .018                  | .918                  | .554     | .573     | .205                  | .034     | .016     |
| 5  | Integrity of contingent co-worker                      | .699                  | .014                  | .012                  | .863                  | .420     | .412     | .574                  | .047     | .027     |
| 6  | Trust in contingent co-worker                          | .671                  | .013                  | .004                  | .119                  | .207     | .113     | .788                  | .002     | .000     |
| 7  | Antisocial work behaviour towards contingent co-worker | .000                  | .032                  | .070                  | .001                  | .001     | .001     | .000                  | .001     | .000     |
| 8  | Ability of permanent co-worker                         | .697                  | .177                  | .156                  | .222                  | .538     | .395     | .235                  | .174     | .143     |
| 9  | Benevolence of permanent co-worker                     | .450                  | .690                  | .711                  | .377                  | .910     | .908     | .157                  | .726     | .709     |
| 10 | Integrity of permanent co-worker                       | .574                  | .065                  | .076                  | .030                  | .680     | .825     | .191                  | .177     | .189     |
| 11 | Trust in permanent co-worker                           | .268                  | .317                  | .304                  | .000                  | .428     | .587     | .653                  | .267     | .343     |
| 12 | Antisocial work behaviours towards permanent co-worker | .001                  | .004                  | .018                  | .378                  | .278     | .488     | .065                  | .054     | .024     |
| 13 | Person focused ICB towards contingent co-worker        | .060                  | .066                  | .040                  | .062                  | .145     | .271     | .175                  | .017     | .009     |
| 14 | Task focused ICB towards contingent co-worker          | .022                  | .018                  | .013                  | .118                  | .074     | .195     | .213                  | .023     | .007     |
| 15 | Person focused ICB towards permanent co-worker         | .205                  | .000                  | .004                  | .068                  | .164     | .314     | .263                  | .000     | .002     |
| 16 | Task focused ICB towards permanent co-worker           | .234                  | .014                  | .056                  | .202                  | .086     | .103     | .395                  | .020     | .059     |

*Note.* Data taken from the ANOVA test's outputs labelled ‘test of homogeneity of variances’ and ‘robust tests of equality of means’.

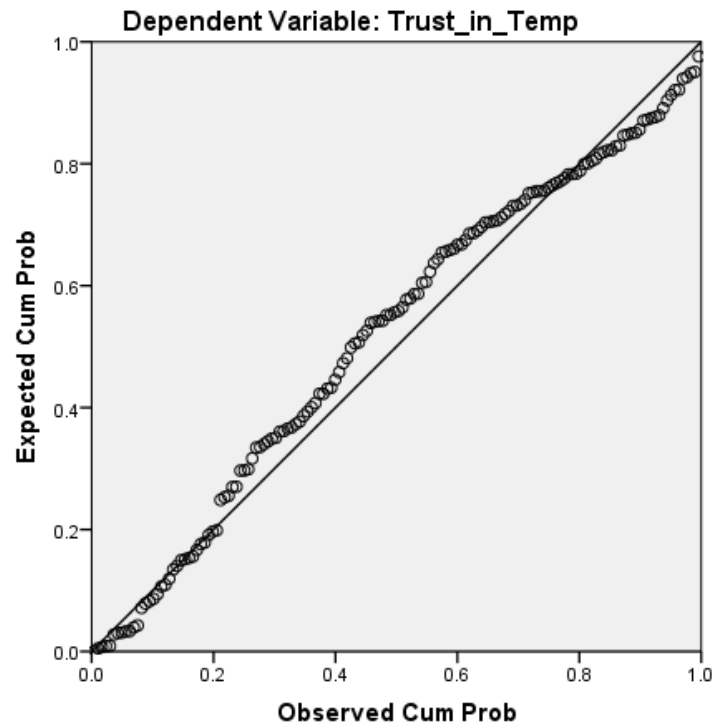
<sup>a</sup>Permanent employee sample (n=154). <sup>b</sup>Contingent employee sample (n=46). <sup>c</sup>Combined employee sample (n=200). <sup>d</sup>Test of homogeneity of variances. <sup>e</sup>Welch F-ratio. <sup>f</sup>Brown-Forsythe F-ratio.



#### Appendix 4.6: Normal probability plots.

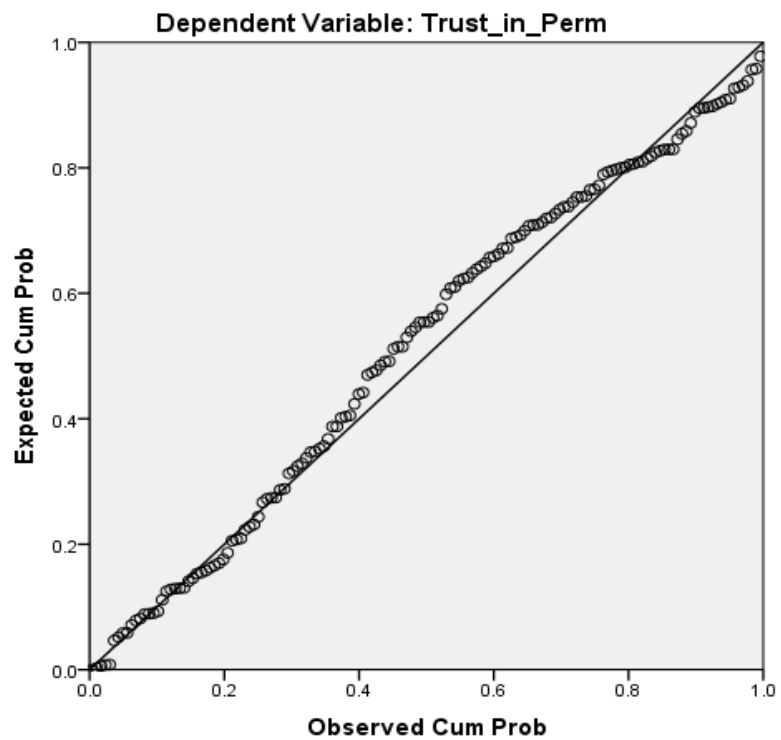
Regression model: Antecedents of trust in contingent co-worker (n=154)

Normal P-P Plot of Regression Standardized Residual



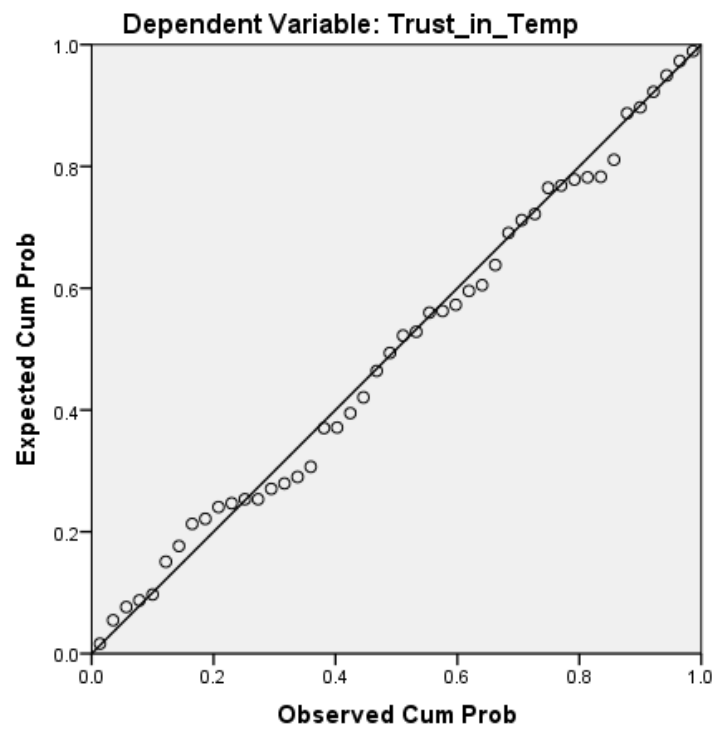
Regression model: Antecedents of trust in permanent co-worker (n=154)

Normal P-P Plot of Regression Standardized Residual



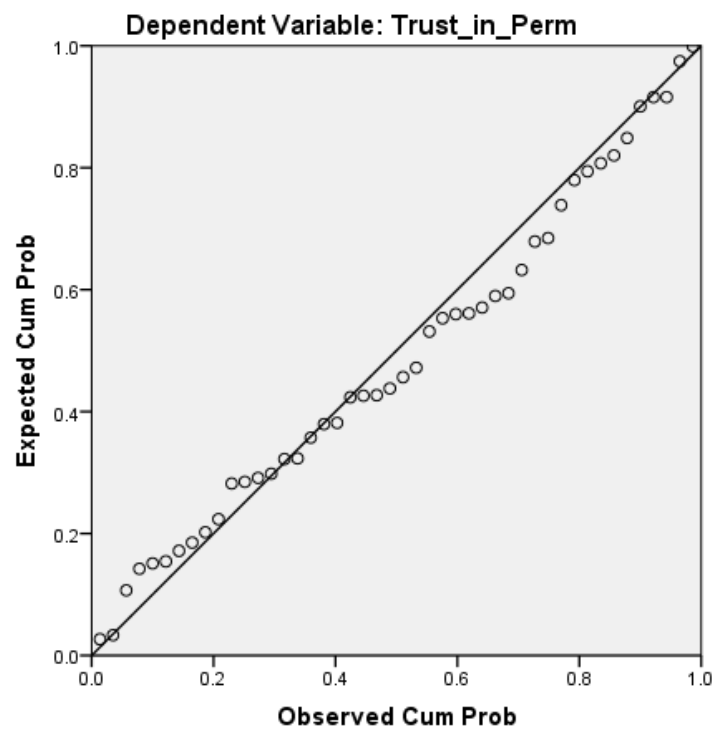
Regression model: Antecedents of trust in contingent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



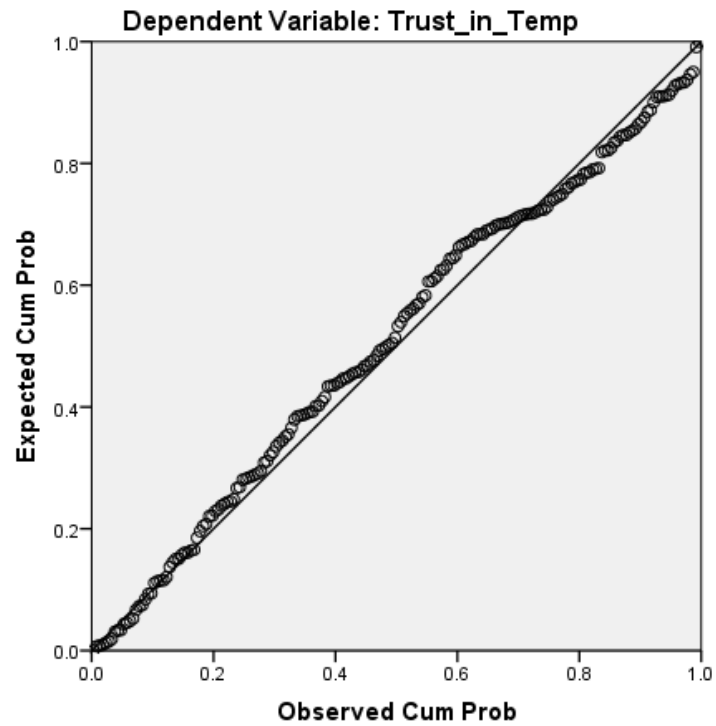
Regression model: Antecedents of trust in permanent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



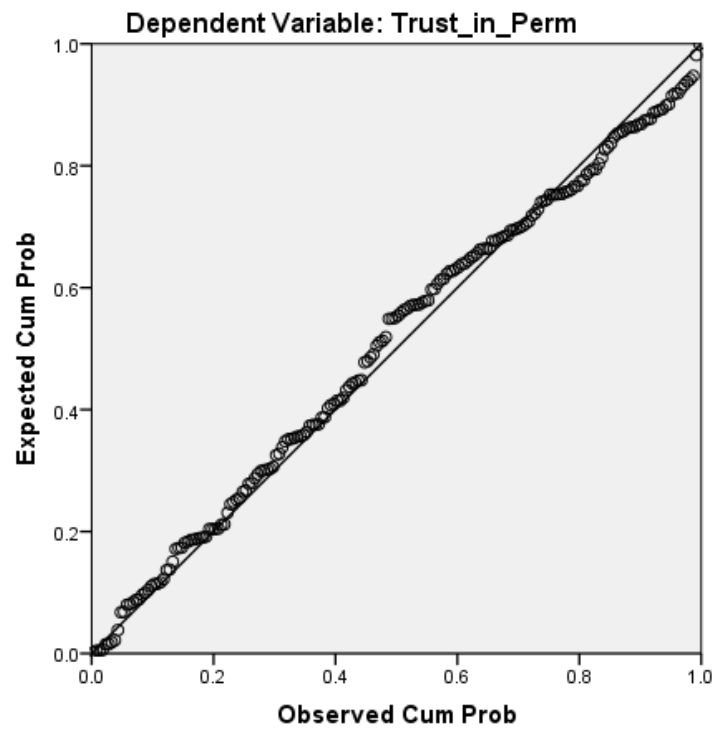
Regression model: Antecedents of trust in contingent co-worker (n=200)

Normal P-P Plot of Regression Standardized Residual



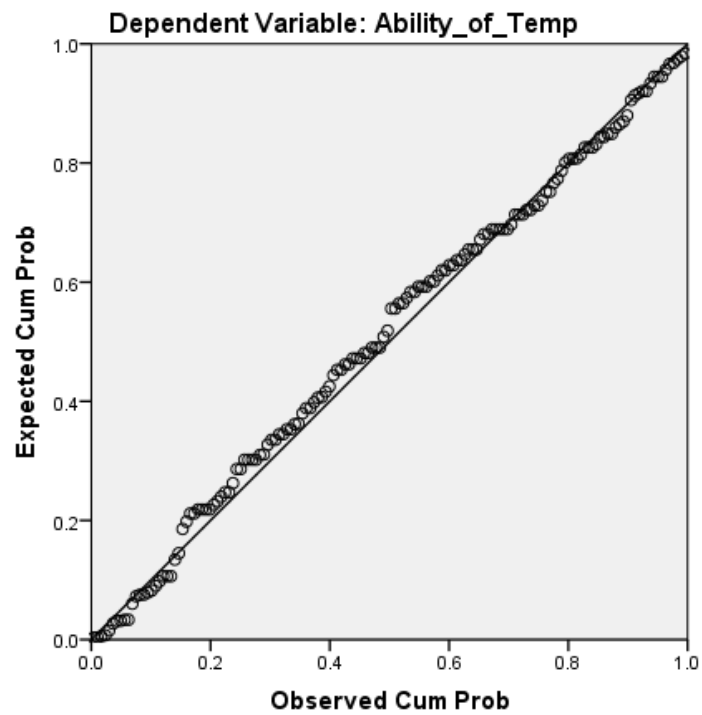
Regression model: Antecedents of trust in permanent co-worker (n=200)

Normal P-P Plot of Regression Standardized Residual



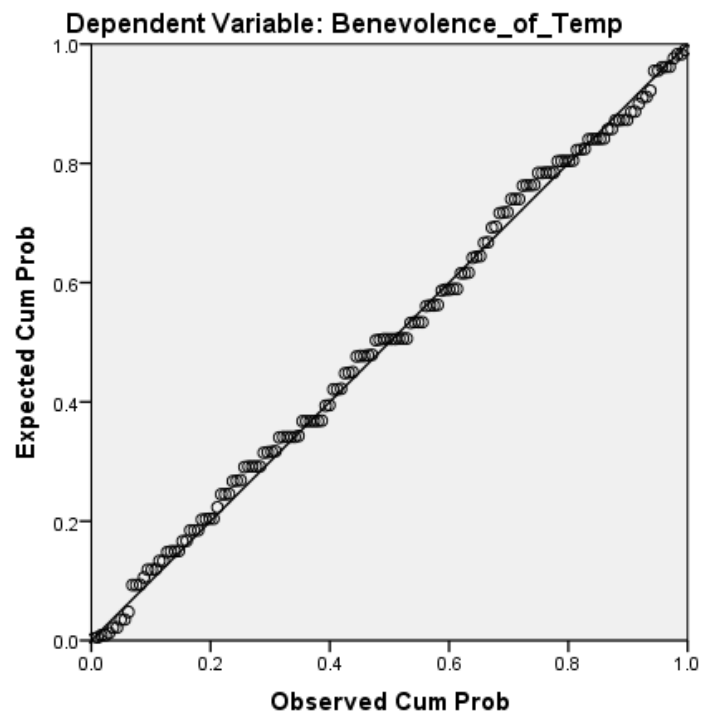
Regression model: propensity to trust impact on ability of contingent co-worker (n=154)

Normal P-P Plot of Regression Standardized Residual



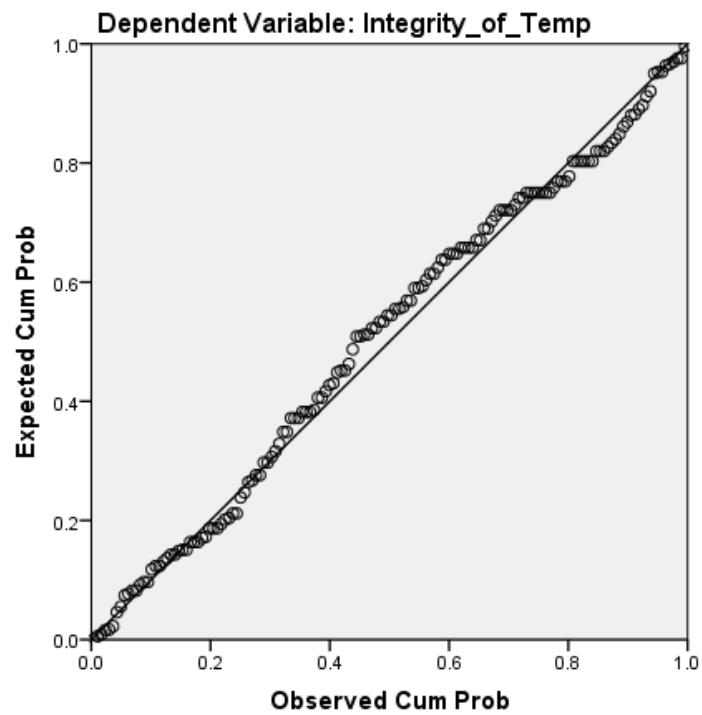
Regression model: Propensity to trust impact on benevolence of contingent co-worker (n=154)

Normal P-P Plot of Regression Standardized Residual



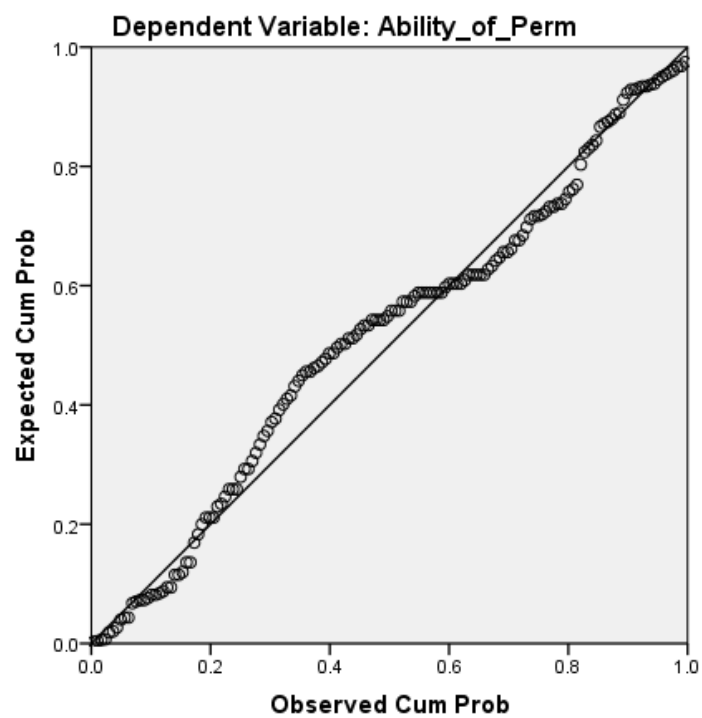
Regression model: Propensity to trust impact on integrity of contingent co-worker (n=154)

Normal P-P Plot of Regression Standardized Residual



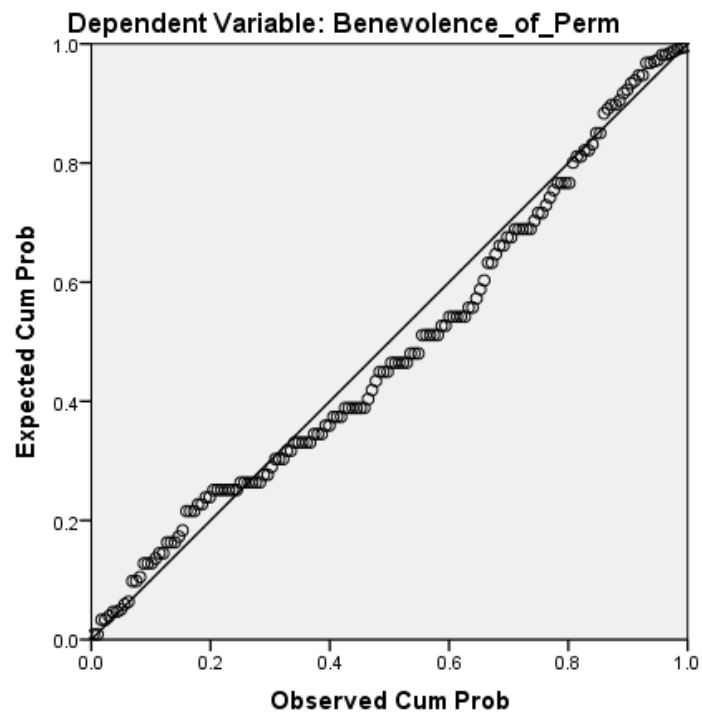
Regression model: Propensity to trust impact on ability of permanent co-worker (n=154)

Normal P-P Plot of Regression Standardized Residual



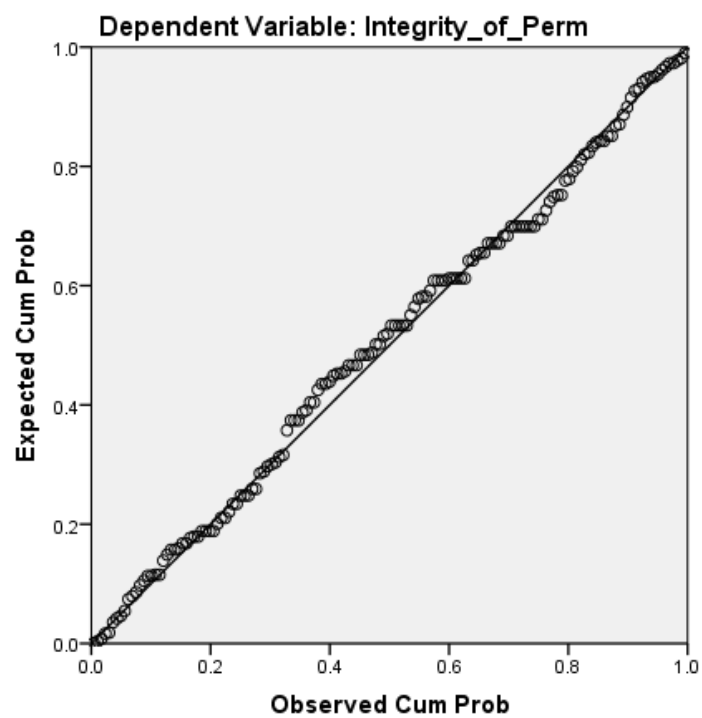
Regression model: Propensity to trust impact on benevolence of permanent co-worker (n=154)

Normal P-P Plot of Regression Standardized Residual



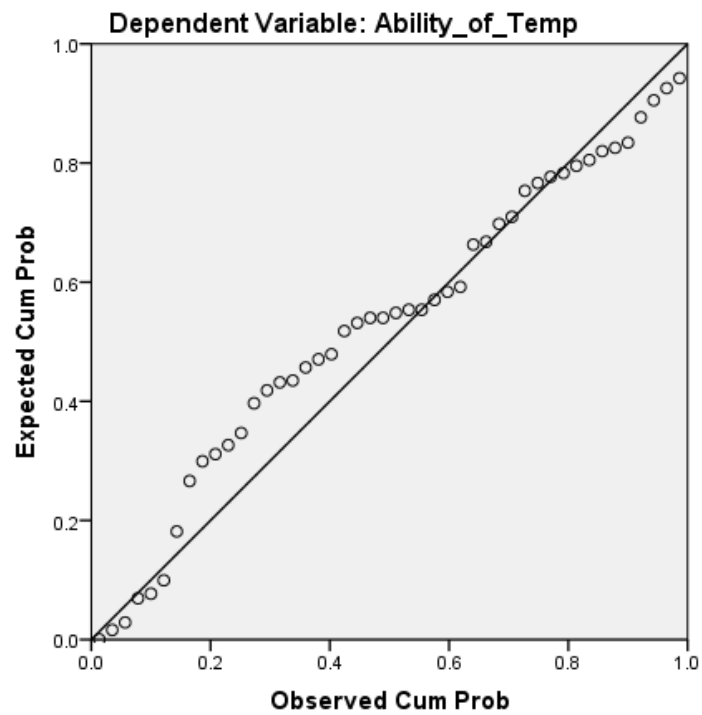
Regression model: Propensity to trust impact on integrity of permanent co-worker (n=154)

Normal P-P Plot of Regression Standardized Residual



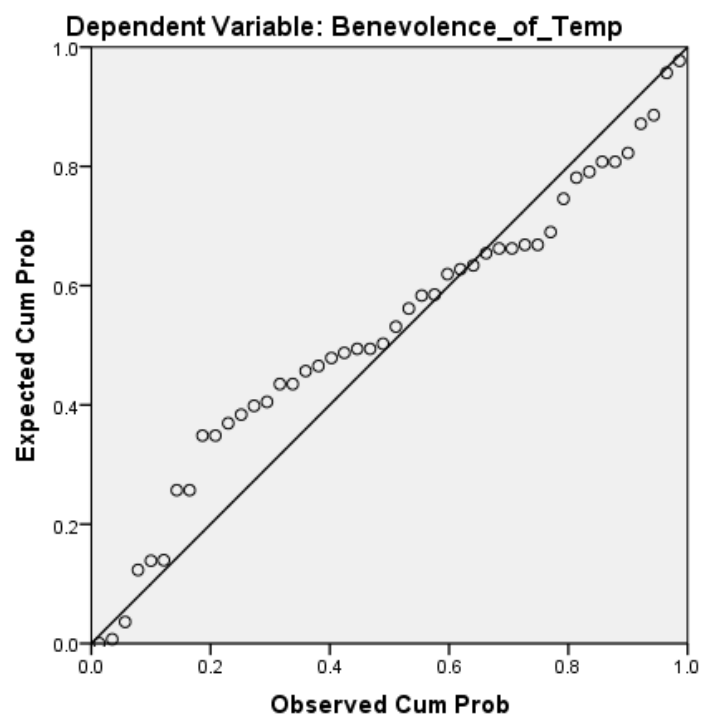
Regression model: Propensity to trust impact on ability of contingent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



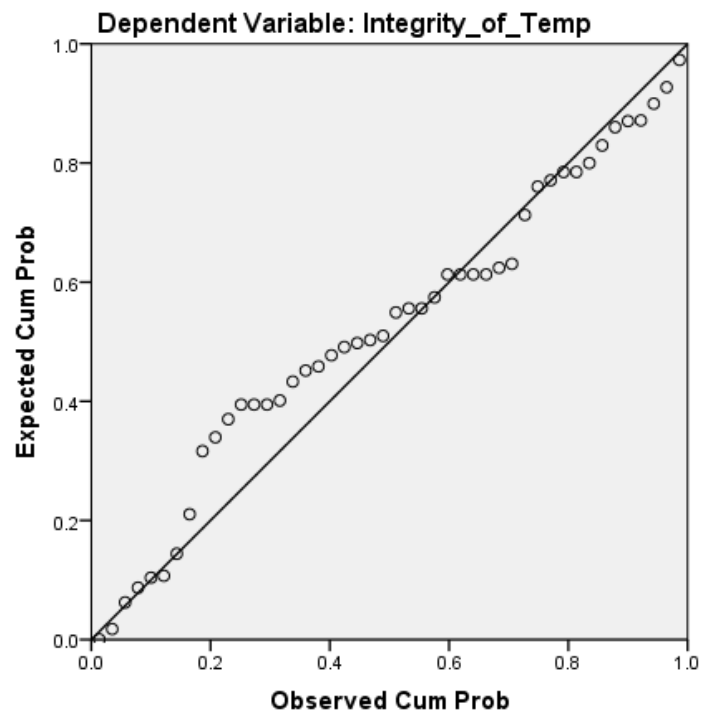
Regression model: Propensity to trust impact on benevolence of contingent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



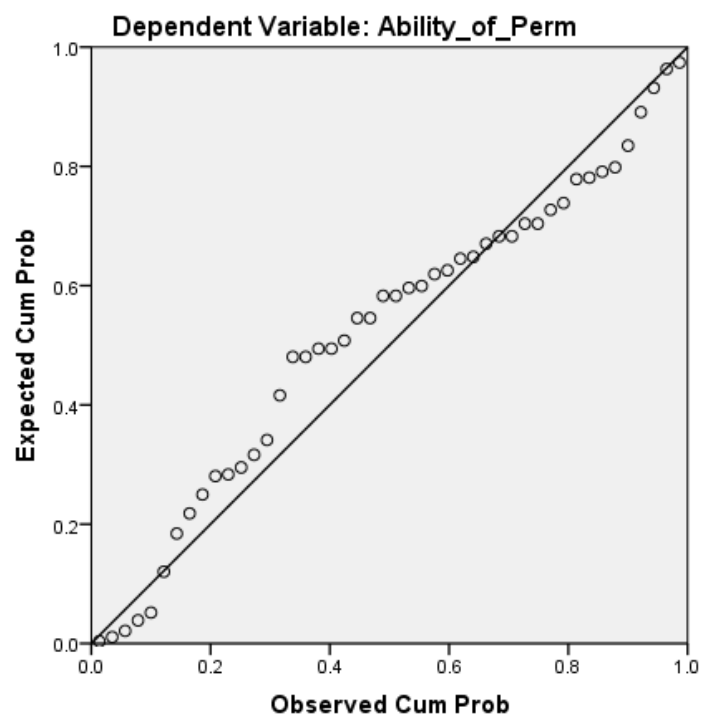
Regression model: Propensity to trust impact on integrity of contingent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



Regression model: Propensity to trust impact on ability of permanent co-worker (n=46)

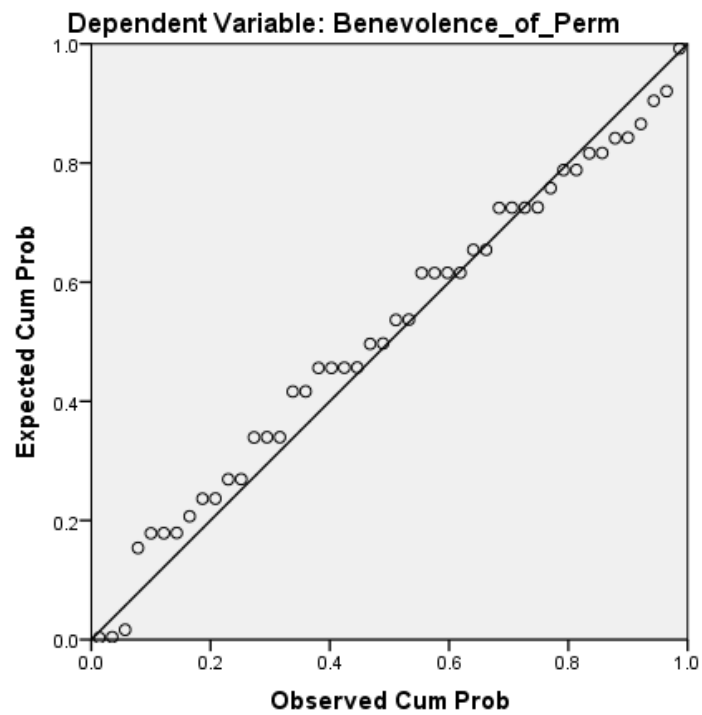
Normal P-P Plot of Regression Standardized Residual





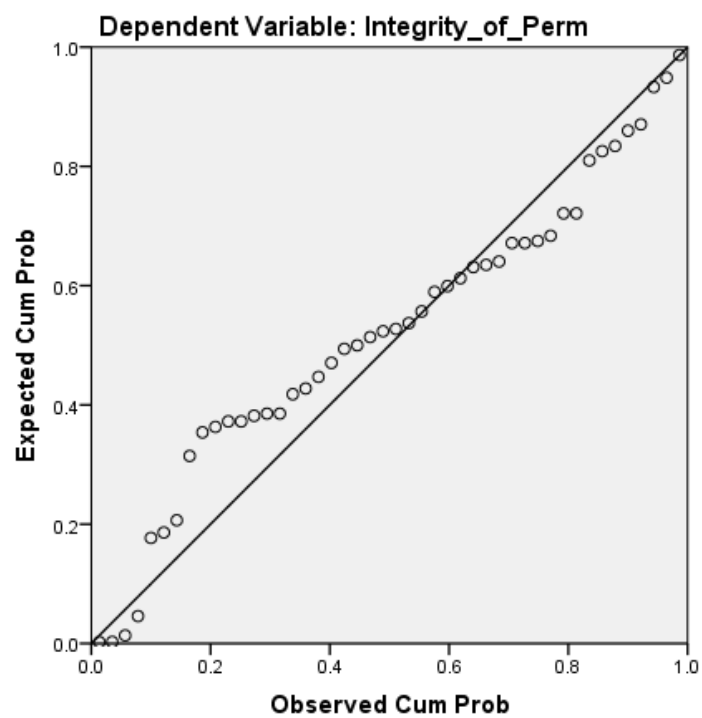
Regression model: Propensity to trust impact on benevolence of permanent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



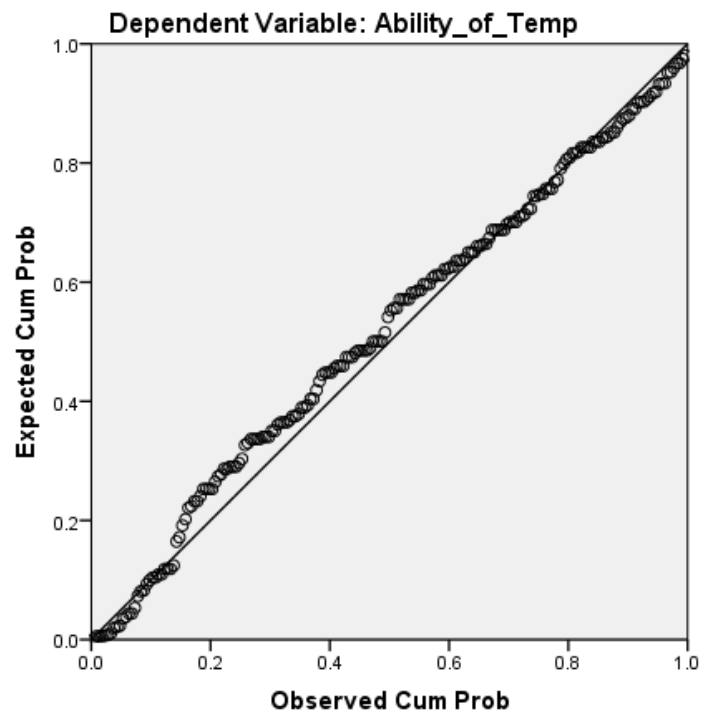
Regression model: Propensity to trust impact on integrity of permanent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



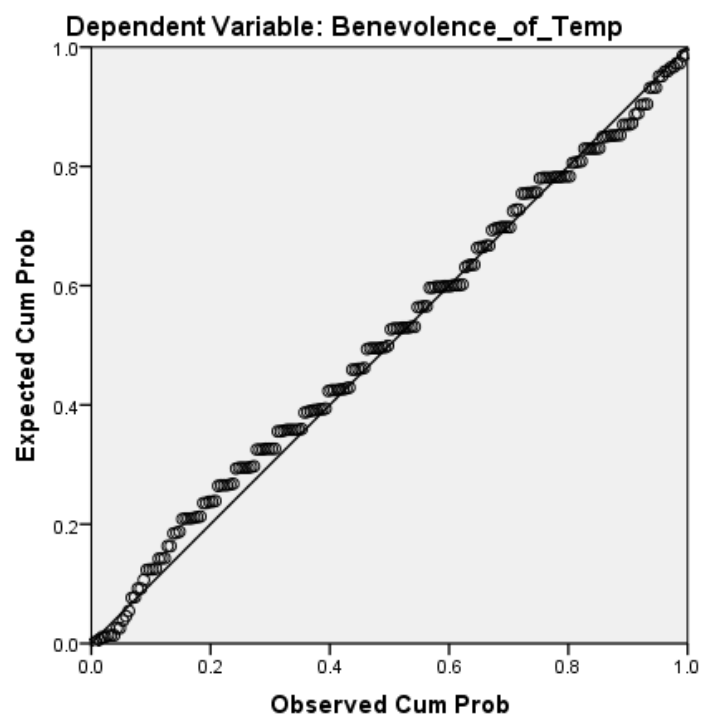
**Regression model: Propensity to trust impact on ability of contingent co-worker (n=200)**

**Normal P-P Plot of Regression Standardized Residual**



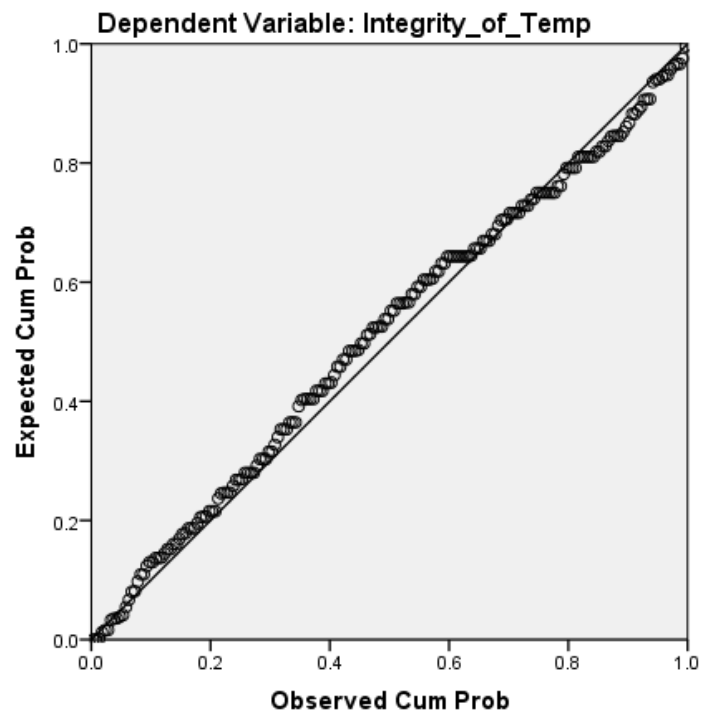
**Regression model: Propensity to trust impact on benevolence of contingent co-worker (n=200)**

**Normal P-P Plot of Regression Standardized Residual**



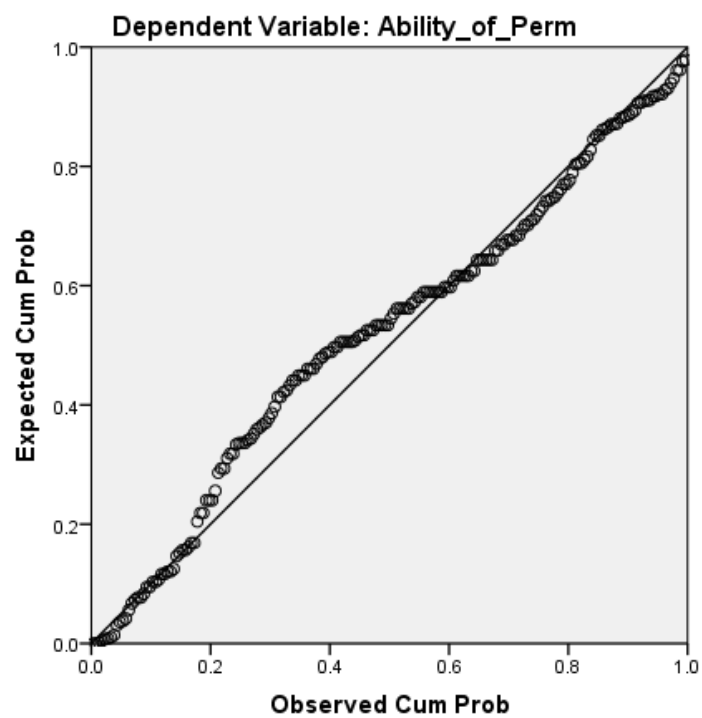
Regression model: Propensity to trust impact on integrity of contingent co-worker (n=200)

Normal P-P Plot of Regression Standardized Residual



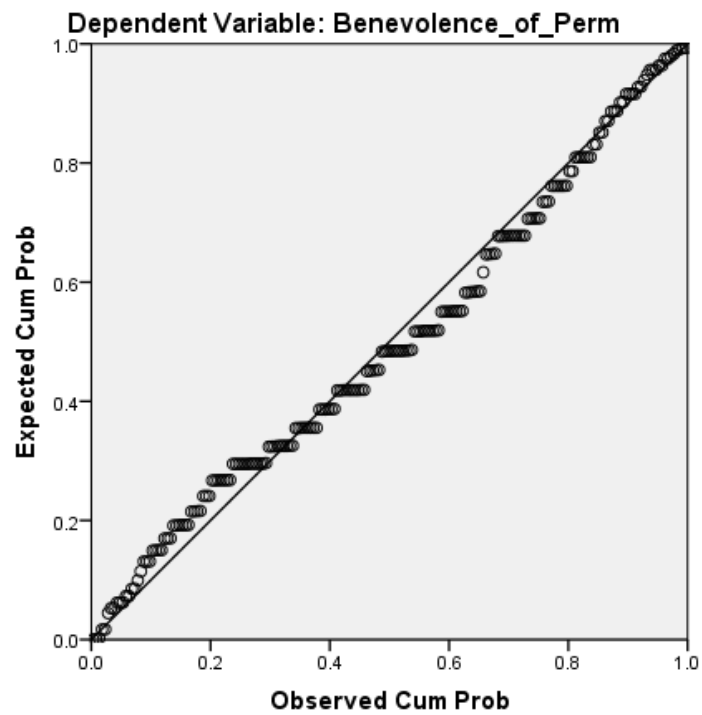
Regression model: Propensity to trust impact on ability of permanent co-worker (n=200)

Normal P-P Plot of Regression Standardized Residual



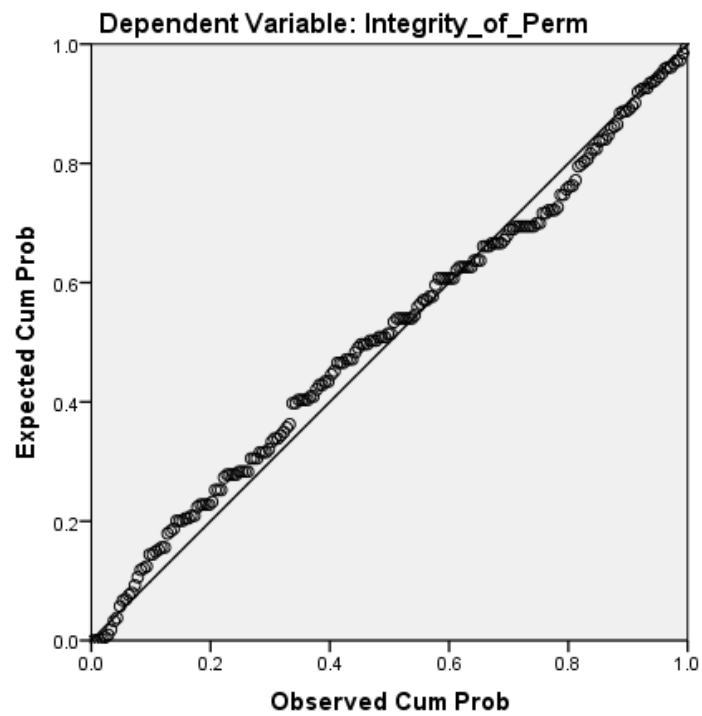
Regression model: Propensity to trust impact on benevolence of permanent co-worker (n=200)

Normal P-P Plot of Regression Standardized Residual



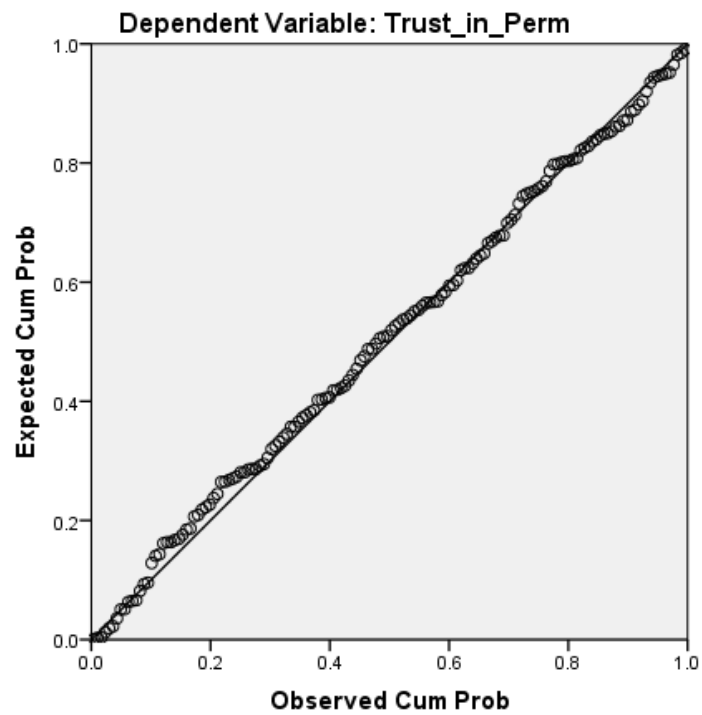
Regression model: Propensity to trust impact on integrity of permanent co-worker (n=200)

Normal P-P Plot of Regression Standardized Residual



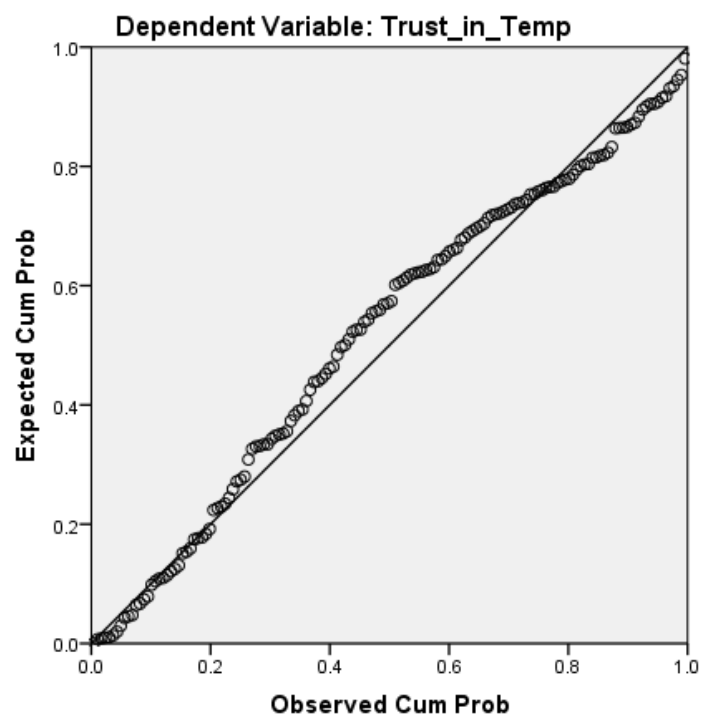
**Regression model: Trust in contingent co-worker impact on trust in a permanent co-worker (n=154)**

**Normal P-P Plot of Regression Standardized Residual**



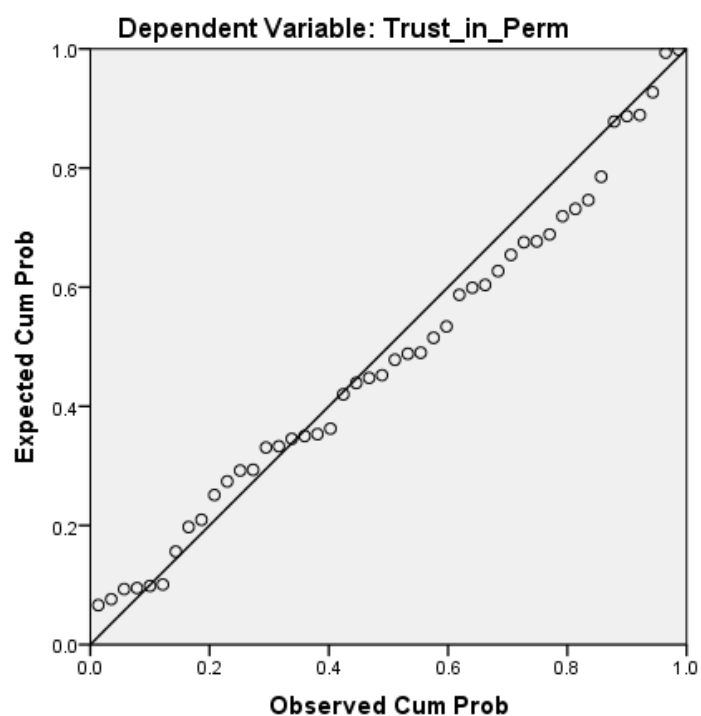
**Regression model: Trust in permanent co-worker impact on trust in a contingent co-worker (n=154)**

**Normal P-P Plot of Regression Standardized Residual**



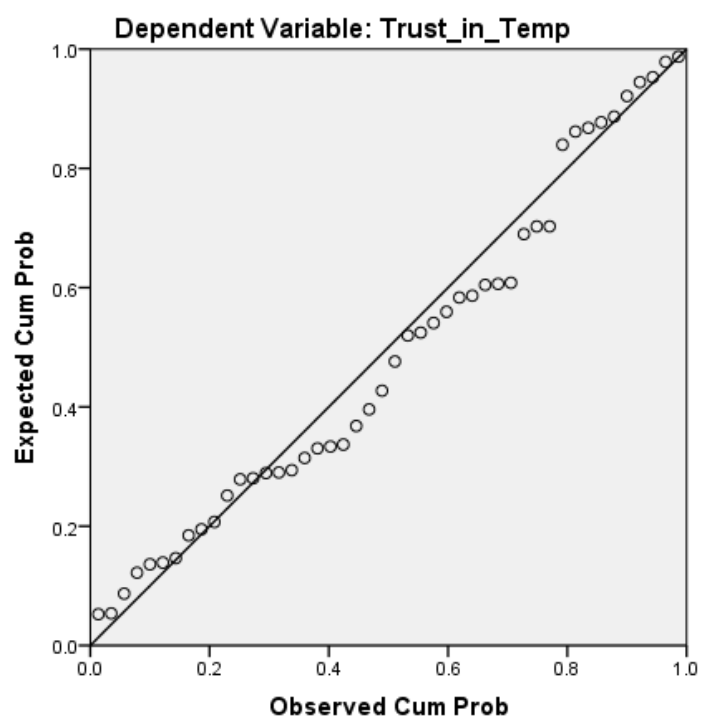
Regression model: Trust in contingent co-worker impact on trust in permanent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



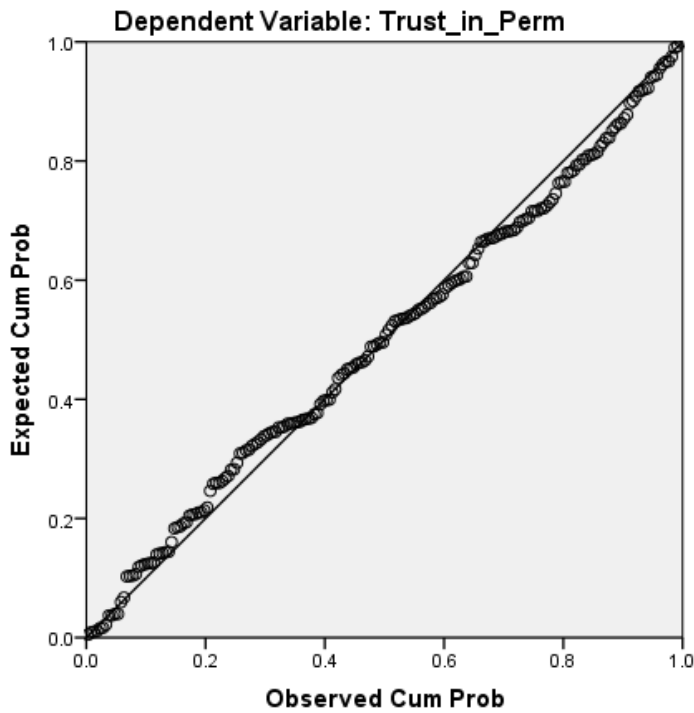
Regression model: Trust in permanent co-worker impact on trust in contingent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



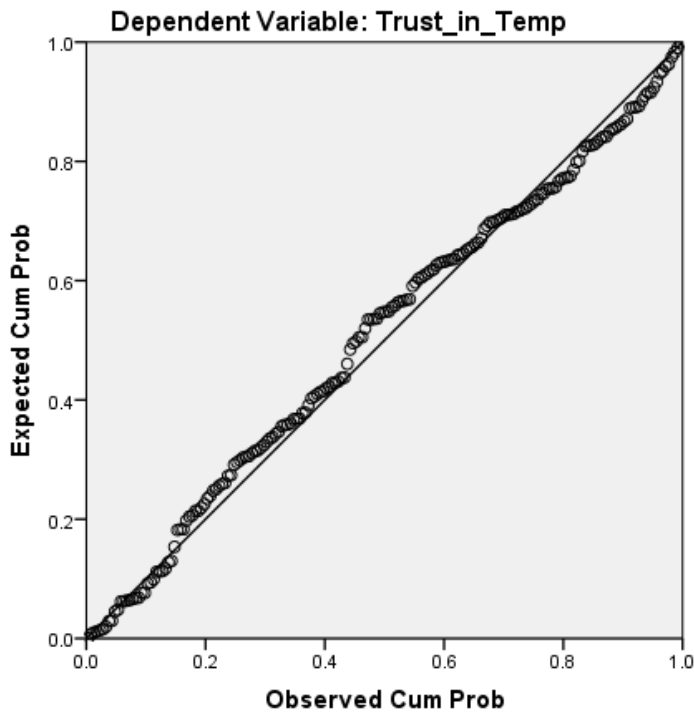
Regression model: Trust in contingent co-worker impact on trust in permanent co-worker (n=200)

Normal P-P Plot of Regression Standardized Residual



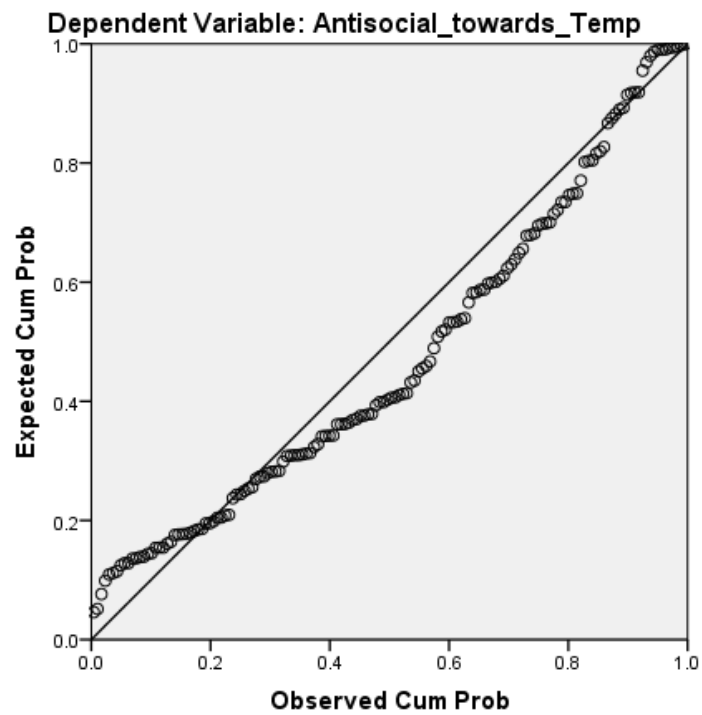
Regression model: Trust in permanent co-worker impact on trust in contingent co-worker (n=200)

Normal P-P Plot of Regression Standardized Residual



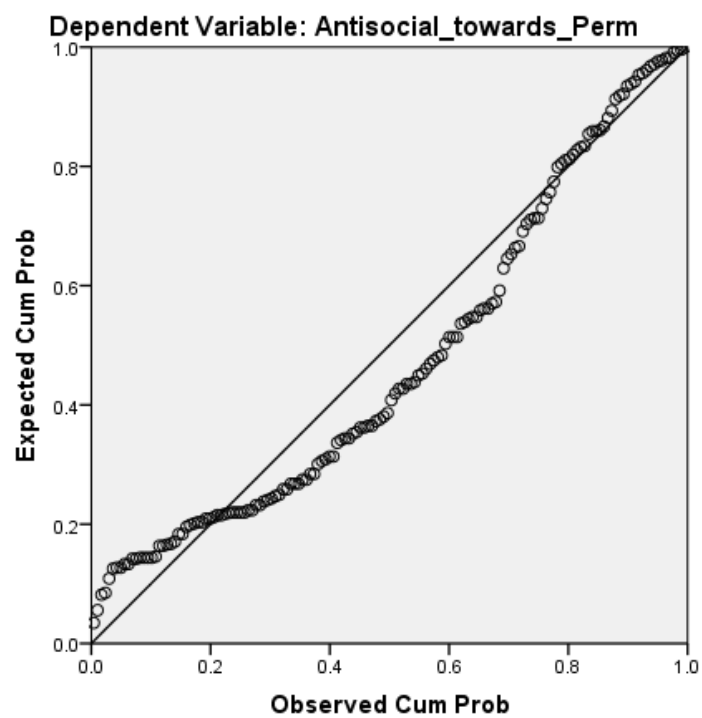
**Regression model: Antecedents of antisocial work behaviours towards  
contingent co-worker (n=154)**

**Normal P-P Plot of Regression Standardized Residual**



**Regression model: Antecedents of antisocial work behaviours towards  
permanent co-worker (n=154)**

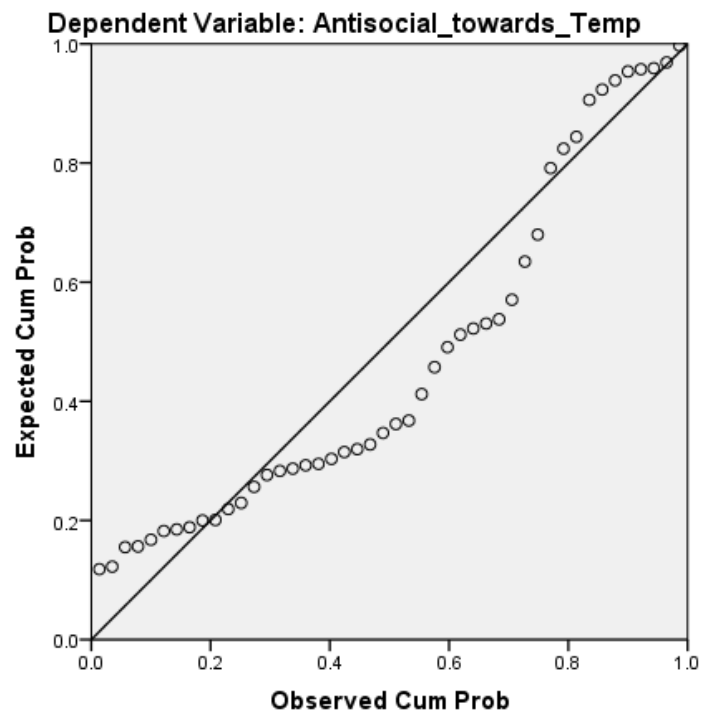
**Normal P-P Plot of Regression Standardized Residual**





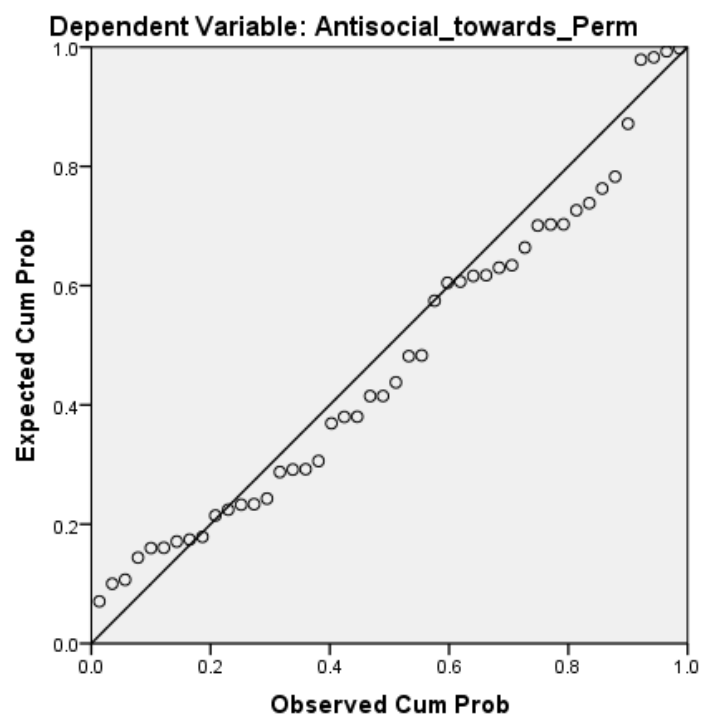
**Regression model: Antecedents of antisocial work behaviours towards  
contingent co-worker (n=46)**

**Normal P-P Plot of Regression Standardized Residual**



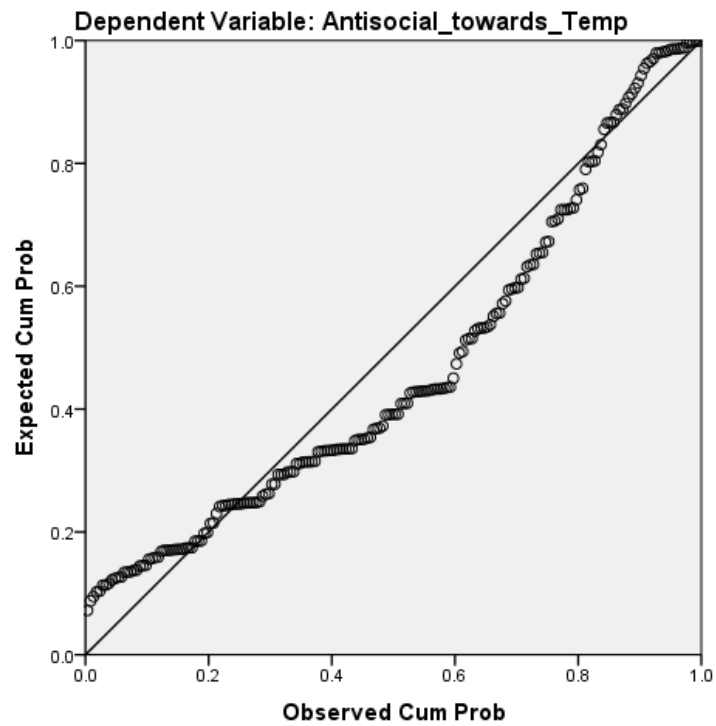
**Regression model: Antecedents of antisocial work behaviours towards  
permanent co-worker (n=46)**

**Normal P-P Plot of Regression Standardized Residual**



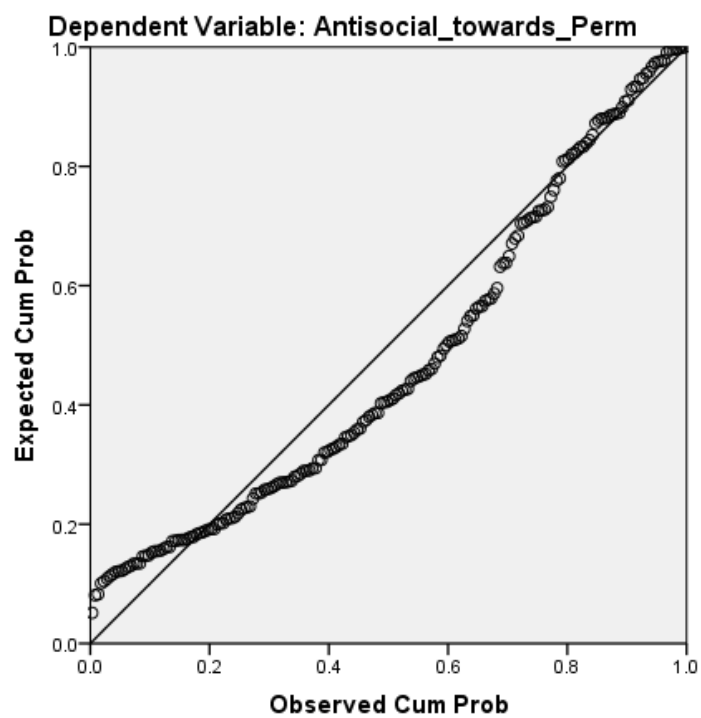
**Regression model: Antecedents of antisocial work behaviours towards  
contingent co-worker (n=200)**

**Normal P-P Plot of Regression Standardized Residual**



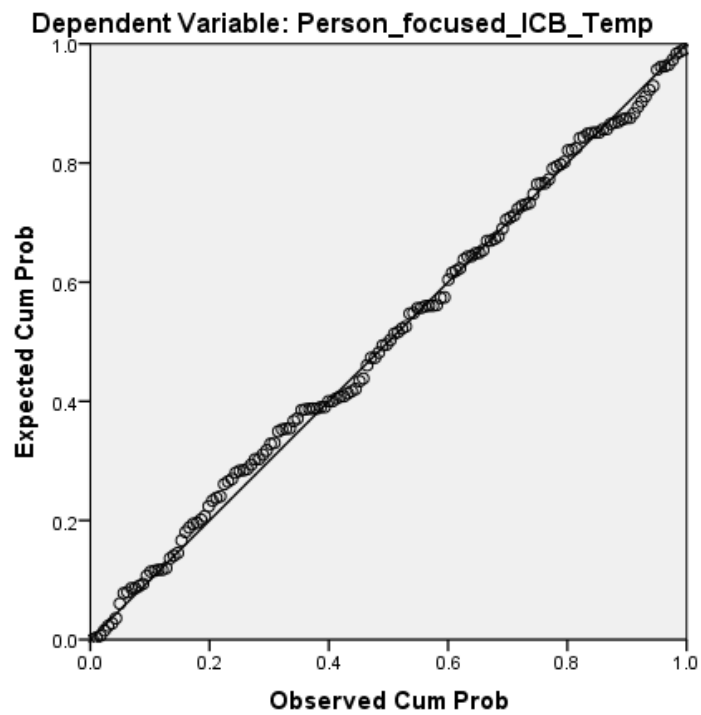
**Regression model: Antecedents of antisocial work behaviours towards  
permanent co-worker (n=200)**

**Normal P-P Plot of Regression Standardized Residual**



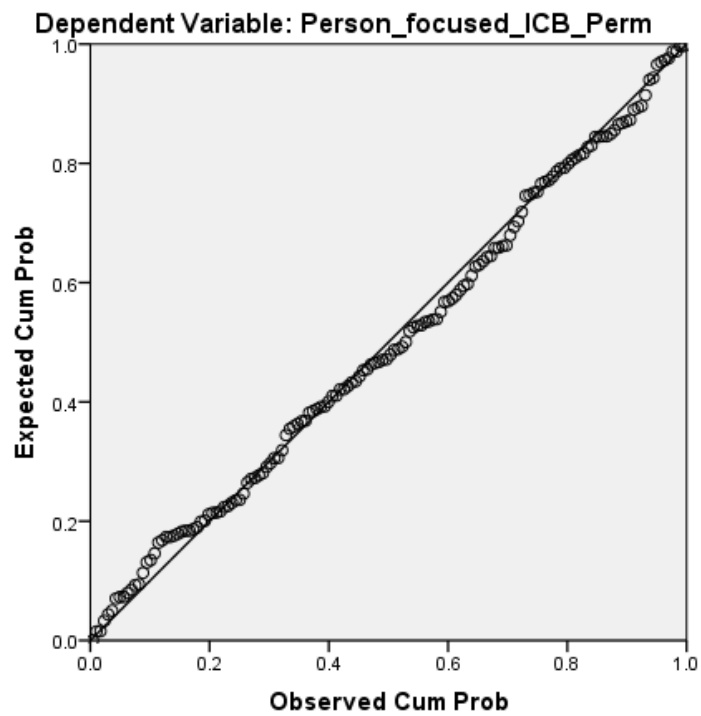
**Regression model: Antecedents of person-focused ICB towards contingent co-worker (n=154)**

**Normal P-P Plot of Regression Standardized Residual**



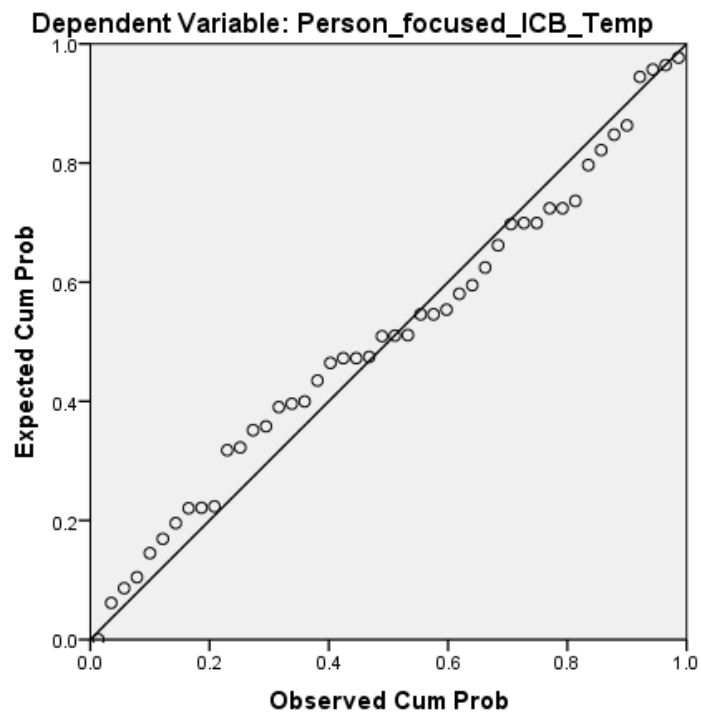
**Regression model: Antecedents of person-focused ICB towards permanent co-worker (n=154)**

**Normal P-P Plot of Regression Standardized Residual**



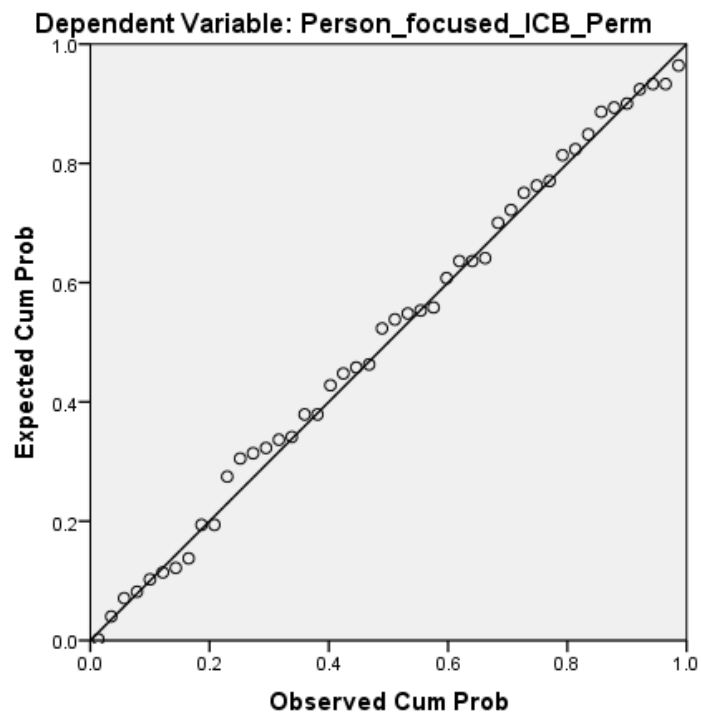
Regression model: Antecedents of person-focused ICB towards contingent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



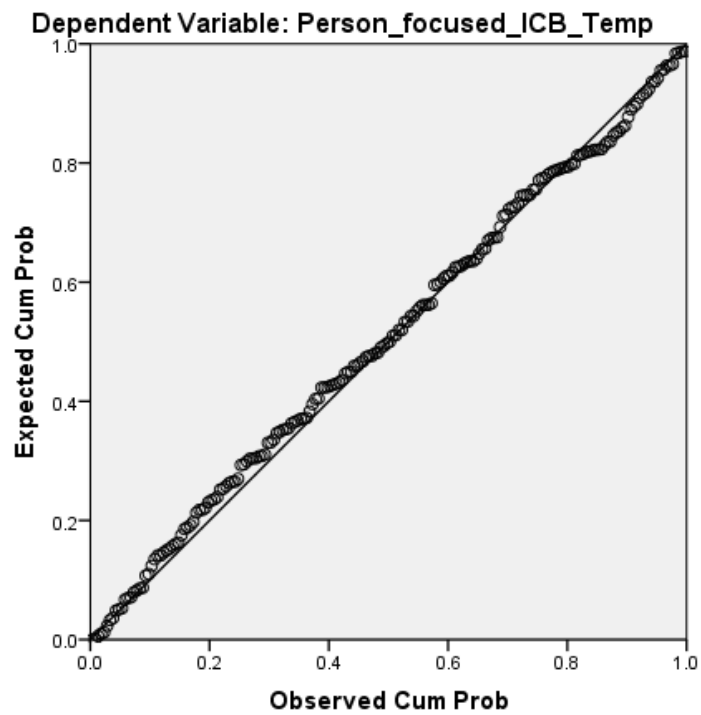
Regression model: Antecedents of person-focused ICB towards permanent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



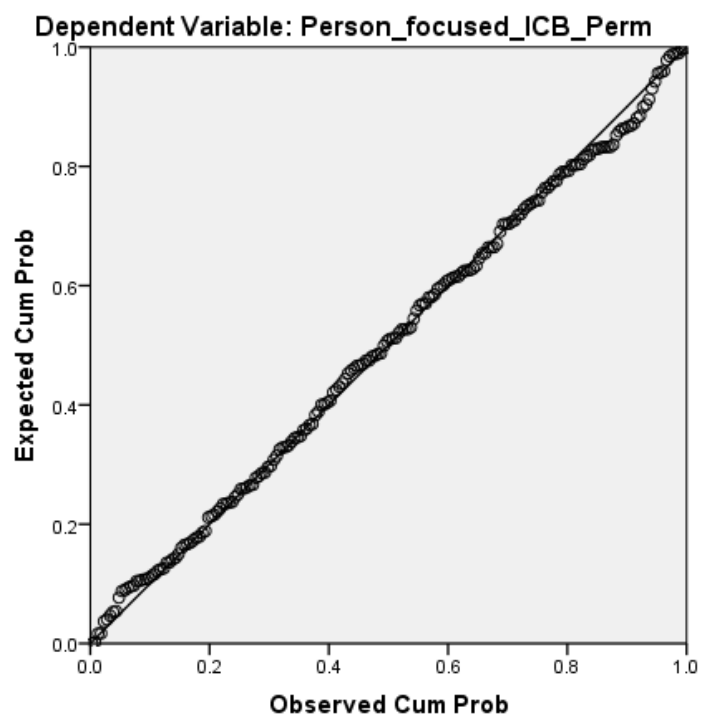
**Regression model: Antecedents of person-focused ICB towards contingent co-worker (n=200)**

**Normal P-P Plot of Regression Standardized Residual**



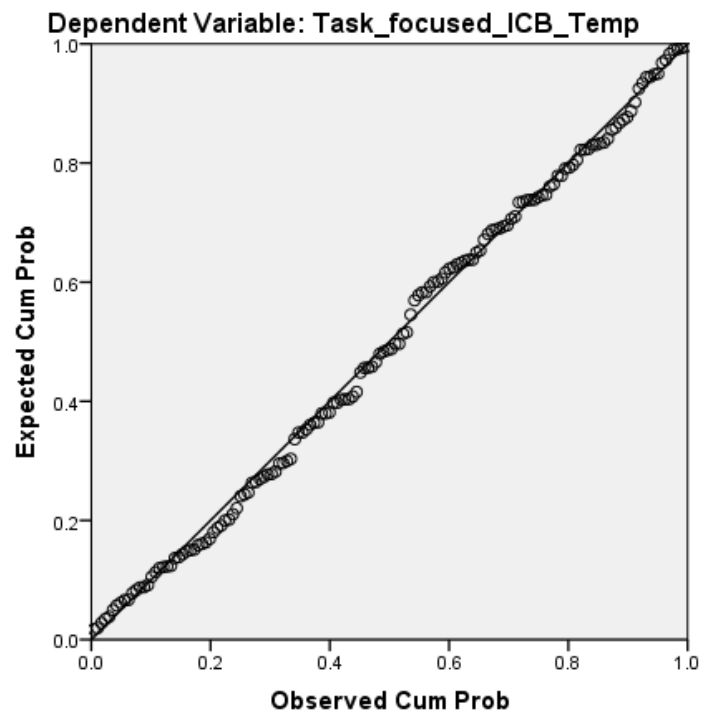
**Regression model: Antecedents of person-focused ICB towards permanent co-worker (n=200)**

**Normal P-P Plot of Regression Standardized Residual**



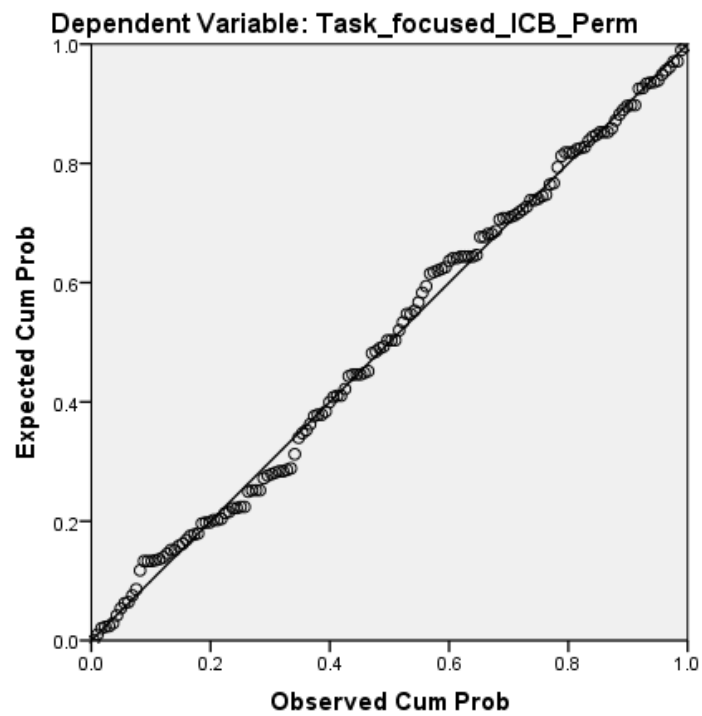
Regression model: Antecedents of task-focused ICB towards contingent co-worker (n=154)

Normal P-P Plot of Regression Standardized Residual



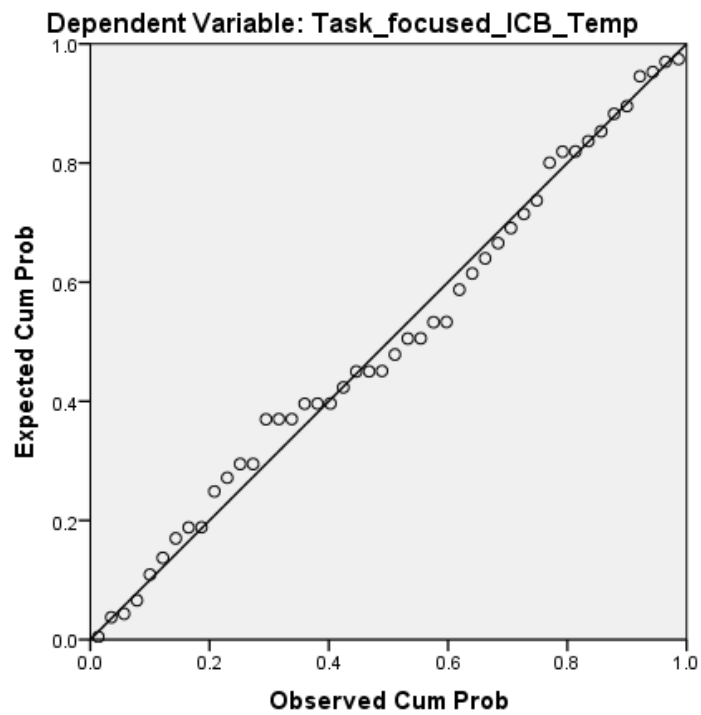
Regression model: Antecedents of task-focused ICB towards permanent co-worker (n=154)

Normal P-P Plot of Regression Standardized Residual



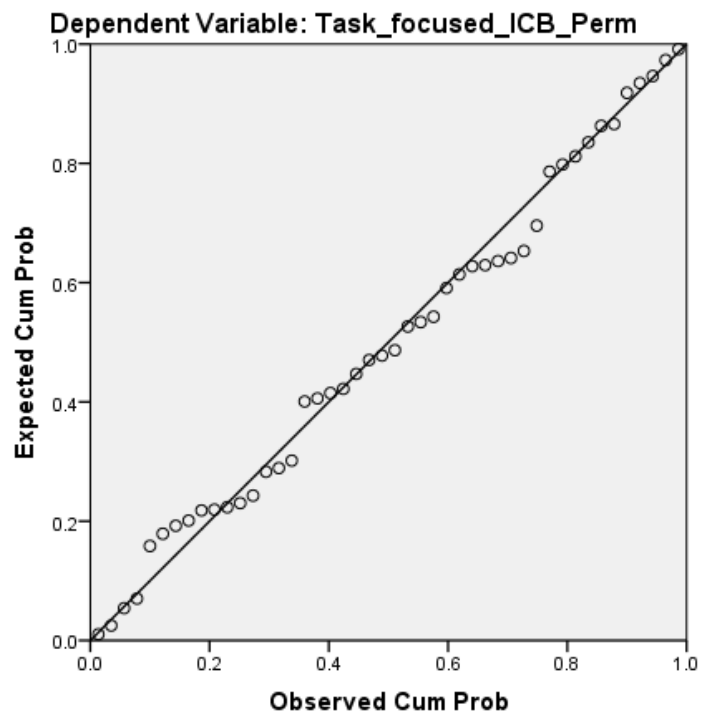
Regression model: Antecedents of task-focused ICB towards contingent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



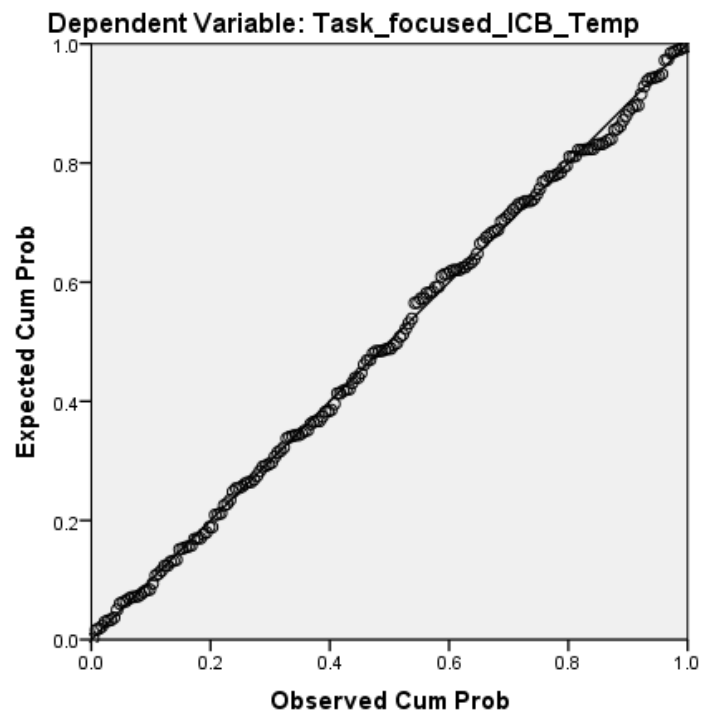
Regression model: Antecedents of task-focused ICB towards permanent co-worker (n=46)

Normal P-P Plot of Regression Standardized Residual



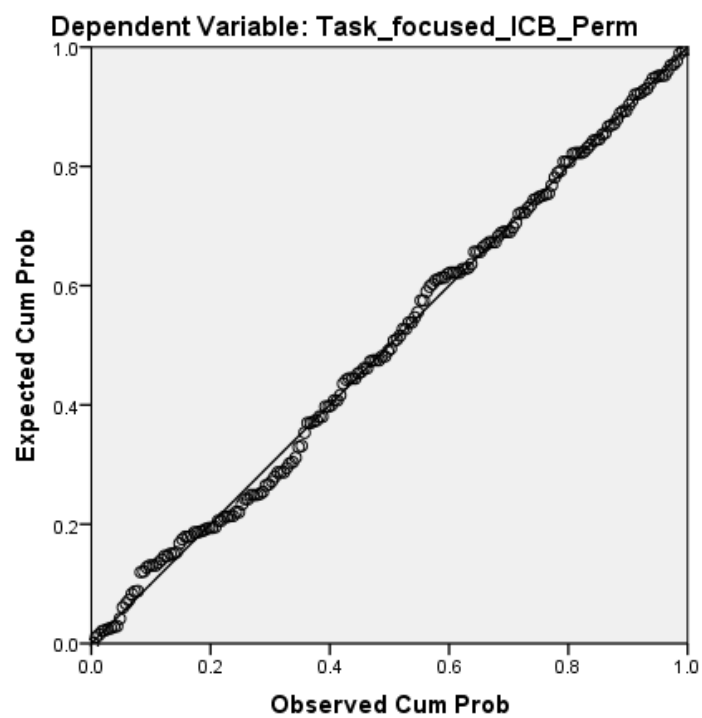
Regression model: Antecedents of task-focused ICB towards contingent co-worker (n=200)

Normal P-P Plot of Regression Standardized Residual



Regression model: Antecedents of task-focused ICB towards permanent co-worker (n=200)

Normal P-P Plot of Regression Standardized Residual





**Appendix 4.7:** One-way between-groups ANOVA with POST-HOC tests' (n=154, 46, 200).

In order to examine the possibilities of combining permanent employee participants, contingent employee participants and all employees (permanent and contingent) into their respective separate samples a 'one-way between-groups ANOVA with post-hoc tests' was conducted. The assumptions for this test and other tests used to compare groups (e.g. paired sample t-test) are also discussed in section 6.3.3 alongside the assumptions for hierarchical regression analysis.

Following Pallant's (2010) advice that the alpha level (usually .05) should be divided by the number of comparisons required, in this case five, the level of significance for the ANOVA test using the 'Bonferroni-type adjustment' method was set at .01.

The significance values for ANOVAs for each of the 16 scales used in each of the three samples are presented in table 4.7–1 and shows, that almost all of the variables have significance values greater than .01, indicating that there are no statistically significant differences between the groups in terms of the means of these variables.

As for the exceptions; ability of contingent co-worker in the permanent employee sample, trust in contingent co-worker in the permanent and combined samples, antisocial work behaviour towards contingent co-worker in the contingent and combined samples and person-focused ICB towards permanent co-worker in the permanent and combined samples, the significance values indicate that there is a statistically significant difference at the  $p < .01$  level among the groups within each respective sample in terms of the mean scores of these variables.

For the permanent employee sample, Post hoc analyses showed that the group 'education' was statistically different from the group 'education 2' and the group 'government' (branch 1) in terms of the mean score of 'ability of contingent co-worker'. For 'trust in contingent co-worker', the only statistically significant difference in the mean score was between the group 'education' and the group 'education 2'. As for 'person-focused ICB towards permanent co-worker', the only statistically significant difference in the mean score of this variable was between the group 'tele-communication' and the group 'media'. However, despite reaching statistical significance, examination of mean scores presented in table 4.7–2 shows that the absolute differences in the mean scores were relatively small (less than 1).

Table 4.7–1: Significance values from the output ‘ANOVA’ for each of the 16 variables in each sample (n=154, 46, 200).

| #  | Scale title  | <i>Sig.</i>           |                       |                       |
|----|--|-----------------------|-----------------------|-----------------------|
|    |  | Sample 1 <sup>a</sup> | Sample 2 <sup>b</sup> | Sample 3 <sup>c</sup> |
| 1  | Propensity to trust                                    | .824                  | .517                  | .628                  |
| 2  | Trust climate  | .256                  | .505                  | .047                  |
| 3  | Ability of contingent co-worker                        | .001                  | .851                  | .031                  |
| 4  | Benevolence of contingent co-worker                    | .031                  | .571                  | .030                  |
| 5  | Integrity of contingent co-worker                      | .012                  | .400                  | .038                  |
| 6  | Trust in contingent co-worker                          | .006                  | .066                  | .000                  |
| 7  | Antisocial work behaviour towards contingent co-worker | .055                  | .003                  | .000                  |
| 8  | Ability of permanent co-worker                         | .169                  | .436                  | .156                  |
| 9  | Benevolence of permanent co-worker                     | .695                  | .898                  | .689                  |
| 10 | Integrity of permanent co-worker                       | .069                  | .811                  | .180                  |
| 11 | Trust in permanent co-worker                           | .278                  | .494                  | .295                  |
| 12 | Antisocial work behaviours towards permanent co-worker | .011                  | .474                  | .014                  |
| 13 | Person focused ICB towards contingent co-worker        | .090                  | .215                  | .015                  |
| 14 | Task focused ICB towards contingent co-worker          | .029                  | .157                  | .011                  |
| 15 | Person focused ICB towards permanent co-worker         | .005                  | .263                  | .001                  |
| 16 | Task focused ICB towards permanent co-worker           | .054                  | .082                  | .044                  |

*Note.* Data taken from the ANOVA test’s output labelled ‘ANOVA’.

<sup>a</sup>Permanent employee sample (n=154). <sup>b</sup>Contingent employee sample (n=46). <sup>c</sup>Combined employee sample (n=200).

For the contingent employee sample, post hoc analyses showed that for ‘antisocial work behaviours towards contingent co-worker’, the only statistically significant difference in the mean score of this variable was between the group ‘tele-communication’ and the group ‘government’ (please refer to table 4.7–3). Even though this difference in means was higher than 1, this can probably be attributed to the low number of respondents in

each of the two sub-groups (tele-communication: 10 respondents, government branch 1: 7 respondents).

Table 4.7–2: Mean scores for each of the three variables in each group within the permanent employee sample (n=154)

| Group               | Mean                             |                                |  |
|---------------------|----------------------------------|--------------------------------|--|
|                     | Ability of contingent co-worker' | Trust in contingent co-worker' | Person-focused ICB towards permanent co-worker |
| Education           | 3.3292                           | 2.6550                         | 3.3406   |
| Education 2         | 3.8514                           | 3.2587                         | 3.6141   |
| Tele-communication  | 3.5588                           | 2.9882                         | 3.1765   |
| Government          | 3.9841                           | 3.3571                         | 3.3810   |
| Government branch 2 | 3.5208                           | 2.7812                         | 3.6719   |
| Media               | 3.8214                           | 2.9857                         | 4.0268   |
| Total               | 3.6645                           | 3.0110                         | 3.5065   |

*Note.* Data taken from the ANOVA test's output labelled 'Descriptives'.

Table 4.7–3: Mean scores for antisocial work behaviours towards contingent co-worker in each group within the contingent employee sample (n=46).

| Group                | Mean  |
|----------------------|---|
|                      | Antisocial work behaviours towards contingent co-worker |
| Education            | 1.4792  |
| Education 2          | 2.0256  |
| Tele-communication   | 2.5167  |
| Government (branch1) | 1.0952  |
| Media                | 1.5417  |
| Total                | 1.8116  |

*Note.* Data taken from the ANOVA test's output labelled 'Descriptives'.

Finally, for the combined employee sample, post hoc analyses showed that the group 'education' was statistically different from the group 'education 2' and the group 'government' (branch 1) in terms of the mean score of 'trust in contingent co-worker'. For 'antisocial work behaviours towards contingent co-worker', statistically significant

differences in the mean score were between the group ‘tele-communication’ and the groups ‘education’, ‘government branch 1’ and ‘media’.

As for ‘person-focused ICB towards permanent co-worker’, statistically significant differences in the mean score of this variable were between the group ‘media’ and the groups ‘education’ and ‘telecommunication’. Again, examination of mean scores presented in table 4.7–4 shows that the absolute differences in the mean scores were relatively small (less than 1).

Table 4.7–4: Mean scores for the three variables in each group within the combined employee sample (n=200)

| Group               | Mean                                       |   |  |
|---------------------|--|---|--|
|                     | Trust in contingent co-worker <sup>a</sup> | Antisocial work behaviours towards contingent co-worker | Person-focused ICB towards permanent co-worker |
| Education           | 2.6583                                     | 1.6458  | 3.3047   |
| Education 2         | 3.2254                                     | 1.7768  | 3.5614   |
| Tele-communication  | 3.0111                                     | 2.2346  | 3.2778   |
| Government          | 3.4750                                     | 1.4821  | 3.3705   |
| Government branch 2 | 2.7812                                     | 1.8646  | 3.6719   |
| Media               | 3.1591                                     | 1.4924  | 4.0000   |
| Total               | 3.0525                                     | 1.7417  | 3.4919   |

*Note.* Data taken from the ANOVA test’s output labelled ‘Descriptives’.

To summarize, the results of the ‘one-way between-groups ANOVA with post-hoc tests’ for the groups making up each of the three samples, indicate that for most variables of the study, there were no statistically significant differences between the groups in terms of mean scores on these variables. In the few cases where statistically significant differences did exist, the absolute values of the differences were relatively small. Based on these results, the researcher combined these groups together to form each of the three samples examined in this thesis.

**Appendix 4.8:** Correlation matrices between control variables and the dependent variables in each of the three samples (n=154, 46, 200).

Correlation matrix 1:

| # | Dependent variables                                     | Potential control variables |        |        |                 |                     |               |
|---|---|-----------------------------|--------|--------|-----------------|---------------------|---------------|
|   |   | Age                         | Gender | Tenure | Education Level | Propensity to trust | Trust Climate |
| 1 | Trust in contingent co-worker                           | .072                        | .125   | .083   | .004            | .209**              | .202*         |
| 2 | Trust in permanent co-worker                            | .113                        | -.009  | .099   | -.056           | .177*               | .113          |
| 3 | Antisocial work behaviours towards contingent co-worker | .182*                       | -.200* | .171*  | -.083           | -.236**             | -.198*        |
| 4 | Antisocial work behaviours towards permanent co-worker  | .079                        | -.154  | .063   | .075            | -.194*              | -.098         |
| 5 | Person-focused ICB towards contingent co-worker         | .025                        | .047   | .060   | -.157           | .299**              | .279**        |
| 6 | Task-focused ICB towards contingent co-worker           | .075                        | .073   | .085   | -.235**         | .260**              | .222**        |
| 7 | Person-focused ICB towards permanent co-worker          | .169*                       | -.024  | .170*  | -.157           | .198*               | .133          |
| 8 | Task-focused ICB towards permanent co-worker            | .152                        | -.036  | .120   | -.111           | .187*               | .110          |

*Note.* n=154 permanent employees.

\* $p < 0.05$ , Two- tailed. \*\* $p < 0.01$ , Two- tailed.

## Correlation matrix 2

| # | Dependent Variables                                     | Potential control variables |        |        |                 |                     |               |
|---|---|-----------------------------|--------|--------|-----------------|---------------------|---------------|
|   |   | Age                         | Gender | Tenure | Education Level | Propensity to Trust | Trust Climate |
| 1 | Trust in contingent co-worker                           | -.033                       | -.135  | -.198  | -.093           | .289                | .064          |
| 2 | Trust in permanent co-worker                            | -.176                       | -.278  | -.199  | -.136           | .261                | .218          |
| 3 | Antisocial work behaviours towards contingent co-worker | .125                        | .073   | .373*  | .195            | -.503**             | -.228         |
| 4 | Antisocial work behaviours towards permanent co-worker  | -.033                       | .009   | .192   | -.065           | -.467**             | -.392**       |
| 5 | Person-focused ICB towards contingent co-worker         | -.154                       | -.185  | -.229  | -.241           | .469**              | .217          |
| 6 | Task-focused ICB towards contingent co-worker           | -.157                       | -.107  | -.044  | -.120           | .242                | .209          |
| 7 | Person-focused ICB towards permanent co-worker          | -.158                       | -.130  | -.263  | -.162           | .362*               | .288          |
| 8 | Task-focused ICB towards permanent co-worker            | -.260                       | -.043  | -.233  | -.200           | .288                | .222          |

*Note.* n=46 contingent employees.

\* $p < 0.05$ , Two- tailed. \*\* $p < 0.01$ , Two- tailed.

Correlation matrix 3:

| # | Dependent variables                                     | Potential control variables |        |        |                 |                     |               |
|---|---|-----------------------------|--------|--------|-----------------|---------------------|---------------|
|   |   | Age                         | Gender | Tenure | Education Level | Propensity to Trust | Trust Climate |
| 1 | Trust in contingent co-worker                           | .013                        | .064   | .014   | -.032           | .228**              | .184**        |
| 2 | Trust in permanent co-worker                            | .057                        | -.071  | .094   | -.059           | .195**              | .124          |
| 3 | Antisocial work behaviours towards contingent co-worker | .132                        | -.120  | .122   | -.016           | -.309**             | -.191**       |
| 4 | Antisocial work behaviours towards permanent co-worker  | .048                        | -.112  | .065   | .042            | -.265**             | -.167*        |
| 5 | Person-focused ICB towards contingent co-worker         | -.059                       | -.010  | -.019  | -.192**         | .339**              | .278**        |
| 6 | Task-focused ICB towards contingent co-worker           | -.017                       | .030   | .020   | -.226**         | .257**              | .230**        |
| 7 | Person-focused ICB towards permanent co-worker          | .091                        | -.047  | .130   | -.147*          | .236**              | .160*         |
| 8 | Task-focused ICB towards permanent co-worker            | .041                        | -.037  | .083   | -.125           | .212**              | .131          |

*Note.* n=200 employees (both permanent and contingent).

\* $p < 0.05$ , Two- tailed. \*\* $p < 0.01$ , Two- tailed.

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